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Annual Immunisation Coverage Report

2024

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Vaccine abbreviations

13vPCV	13-valent pneumococcal conjugate vaccine
DTPa	diphtheria-tetanus-pertussis (children aged under 10 years formulation)
DT5aP	diphtheria-tetanus-pertussis (children aged under 10 years formulation)
dTpa	diphtheria-tetanus-pertussis (individuals aged 10 years and over formulation)
23vPPV	23-valent pneumococcal polysaccharide vaccine
Flu	influenza
Hep A	hepatitis A
Hep B	hepatitis B
Hib	*Haemophilus influenzae* type b
HPV	human papillomavirus
IPV	inactivated polio vaccine
MenACWY	meningococcal ACWY
MenC	meningococcal C
MMR	measles-mumps-rubella
MMRV	measles-mumps-rubella-varicella

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Abstract

We analysed Australian Immunisation Register (AIR) data for children, adolescents and adults as at 2 February 2025, concentrating primarily on National Immunisation Program (NIP)–funded vaccines. Our focus was on the calendar year 2024 and trends from previous years.

This report provides comprehensive analyses and interpretation of vaccination coverage data to inform immunisation policy and programs in Australia. Along with the results outlined below, the report also includes a range of other data for vaccines given across the lifespan, including data on timeliness and vaccination provider settings.

Population overall

Children

Fully vaccinated coverage decreased between 2023 and 2024 at all three standard age milestones: 12 months (from 92.8% to 91.6%), 24 months (from 90.8% to 89.4%) and 60 months (from 93.3% to 92.7%). This follows the 1.2–2.0 percentage point decrease in vaccination coverage uptake at these three milestones between the 2020 and 2023 reports. A combination of acceptance and access factors have contributed to this ongoing decline.

Adolescents

Coverage of a dose of HPV vaccine by the fifteenth birthday decreased in 2024 to 81.1% in girls and 77.9% boys, 3.1 and 3.9 percentage points lower, respectively, than in 2023 and 5.5 and 7.0 percentage points lower than in 2020. In girls and boys turning 15 years of age in 2024, 83.4% and 80.9%, respectively, had received an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December 2024. Overall, 68.5% of girls and 64.4% of boys turning 16 years of age in 2024 had received an adolescent dose of meningococcal ACWY vaccine by 31 December 2024.

Adults

Zoster vaccination coverage (one dose of Zostavax or two doses of Shingrix given at least 4 weeks apart) was 45.9% for adults aged ≥65 years in 2024. Coverage of an adult dose of 13vPCV was 38.6% for adults turning 71 years of age in 2024, 1.0 percentage point higher than in 2023, and 41.5% for adults aged ≥70 years, 6.9 percentage points higher than in 2023. Influenza vaccination coverage decreased in 2024 across all adult age groups.

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Aboriginal and Torres Strait Islander Peoples

Children

Fully vaccinated coverage for Aboriginal and Torres Strait Islander children decreased between 2023 and 2024 at all three age milestones: 12 months (from 89.7% to 89.2%), 24 months (from 87.8% to 86.7%) and 60 months (95% to 94.4%), following a 2.0–3.4 percentage point decrease between the 2020 and 2023 reports. However, coverage of meningococcal B vaccine, which was introduced onto the NIP for all Aboriginal and Torres Strait Islander children in July 2020, was higher in 2024 than 2023 – 83.0% versus 81.0% for the first dose, 80.9% versus 80.0% for the second dose and 75.0% versus 71.7% for the third dose.

Adolescents

Coverage of a dose of HPV vaccine by the fifteenth birthday decreased in 2024 in Aboriginal and Torres Strait Islander adolescents to 76.7% for girls and 69.2% for boys, 4.2 and 5.8 percentage points lower, respectively, than in 2023 and 11.1 and 13.8 percentage points lower than in 2020. In Aboriginal and Torres Strait Islander girls and boys turning 15 years of age in 2024, 79.3% and 73.0%, respectively, had received an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December 2024. Coverage of an adolescent dose of meningococcal ACWY vaccine received by 31 December 2024 in Aboriginal and Torres Strait Islander adolescents turning 16 years of age in 2024 was 52.7% for girls and 47.1% for boys.

Adults

Zoster vaccination coverage (one dose of Zostavax or two doses of Shingrix given at least 4 weeks apart) was 42.2% for Aboriginal and Torres Strait Islander adults aged ≥65 years in 2024. Coverage of an adult dose of 13vPCV was 48.7% for Aboriginal and Torres Strait Islander adults turning 71 years of age in 2024, 5.7 percentage points higher than in 2023, and 47.8% for those aged ≥70 years, 8.1 percentage points higher than in 2023. However, it was only 23.2% for those aged 50–69 years. Influenza vaccination coverage decreased in 2024 across all Aboriginal and Torres Strait Islander adult age groups.

Conclusions

There have been concerning and persistent downward trends in childhood and adolescent vaccination coverage in Australia since 2020, with further declines in 2024. The picture for adult coverage is more mixed, but consistently suboptimal across all vaccines. National surveys of parents of young children and adults have identified a range of access and acceptance barriers that may be contributing to observed declines in coverage. More research is needed to delineate contributory factors, particularly among adolescents and Aboriginal and Torres Strait Islander

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Peoples. This can then be used to inform evidence-based and culturally appropriate strategies to increase vaccine uptake and coverage equity. The *National Immunisation Strategy for Australia 2025–2030* provides a comprehensive framework to guide such measures and improve coverage – and hence the protection provided by vaccine programs – against disease.

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Introduction

This is the 18th annual Australian immunisation coverage report. These detailed reports now cover the years 2007–2024.[1-16] This 2024 report is the fifth in the series to report 'whole-of-life' vaccination coverage – that is, vaccinations for children, adolescents and adults. It uses data from the Australian Immunisation Register (AIR), which was expanded in 2016, and complements and extends on other vaccination coverage data published by the Australian Government Department of Health, Disability and Ageing.[17] It also provides a comprehensive analysis of trends, and interpretation of their relationship to factors such as policy and program changes. Detailed analyses of coverage data for the calendar year 2024 and trend data from 2015 onwards are included, with a particular focus on vaccines listed on the National Immunisation Program (NIP) and changes in coverage since 2023.

This report uses the longstanding international practice of reporting at key milestone ages to measure coverage – including against national targets, where applicable – and to track trends over time. Vaccination coverage and timeliness for 2024 were measured using AIR data as at 2 February 2025 for the overall population and Aboriginal and Torres Strait Islander Peoples. Feedback was sought from the NCIRS Aboriginal and Torres Strait Islander Advisory Group regarding the layout and interpretation of Aboriginal and Torres Strait Islander coverage data to better align the report's presentation of these data with the Framework for Governance of Indigenous Data.[18]

Childhood cohort vaccination status was assessed as 'fully vaccinated' using the Australian Government Department of Health, Disability and Ageing's definition, i.e. including certain specific vaccine or antigen (component of vaccine) doses that should have been received by the relevant age milestone. Childhood cohort vaccination status was assessed for individual vaccines:

- at the three standard milestones – 12 months of age (for vaccines due at 6 months), 24 months of age (for vaccines due at 6, 12 and 18 months) and 60 months of age (for vaccines due at 48 months)
- at national and jurisdictional level
- at small area levels (Primary Health Network [PHN] and Australian Bureau of Statistics Statistical Area 3 [SA3]).

Coverage for vaccines included in the NIP for Aboriginal and Torres Strait Islander children only was also assessed for relevant jurisdictions using appropriate milestones and cohorts. Timeliness of childhood vaccination was assessed by calculating 'on-time' vaccination (i.e. those that occurred within 30 days of children reaching the recommended age) for selected vaccine doses, as well as

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by calculating fully vaccinated coverage at age milestones earlier than the standard ones (i.e. at 9, 15, 21 and 51 months) by jurisdiction and PHN.

Coverage for vaccines included in the NIP for adolescents and adults was assessed using appropriate milestones and cohorts. We assessed:

- coverage of at least one dose of human papillomavirus (HPV) vaccine for adolescents and young adults aged 13–25 years (noting the NIP schedule changed in January 2023 from two doses to one dose of HPV vaccine)
- an adolescent dose of diphtheria-tetanus-pertussis (dTpa) vaccine for adolescents aged 13–19 years
- an adolescent dose of meningococcal ACWY vaccine for adolescents aged 15–19 years, by jurisdiction, age and sex.

We assessed coverage for zoster vaccination by:

- age – for adults turning 65 years and over in 2024 (50 years for Aboriginal and Torres Strait Islander adults)
- jurisdiction.

We also assessed uptake of the Shingrix vaccine by jurisdiction in the population of adults aged ≥65 years who were eligible to receive Shingrix under the NIP following its inclusion on 1 November 2023.

Coverage for 13-valent pneumococcal conjugate vaccine (13vPCV) in adults turning 70 years and over (50 years for Aboriginal and Torres Strait Islander adults), and influenza vaccination coverage for 2024, compared to 2023, was assessed across all ages. We also calculated composite measures of vaccination coverage for the vaccines included on the NIP for adolescents and adults.[19] For the first time in this series of report, we assessed up-to-date diphtheria, tetanus and pertussis vaccination coverage for adults aged 50–64 years and adults aged ≥65 years in 2024. This occurred for all adults and Aboriginal and Torres Strait Islander adults. Finally, we assessed 'up-to-date coverage' for COVID-19 vaccination for adults aged 18–64 years who had received at least one dose of a COVID-19 vaccine ever by 31 December 2024, by age group and jurisdiction.

A more detailed description of the methods used in this report is provided in the Appendix.

The NIP schedule in 2024 is summarised in Table A1 in the Appendix. Key recent changes to vaccination policy and fully vaccinated coverage algorithms relevant to interpretation of findings in this report are shown in Box 1 in the Appendix.

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Results

All children

Coverage at 12, 24 and 60 months of age

Fully vaccinated

Fully vaccinated coverage decreased between 2023 and 2024 at all three age milestones: 12 months (from 92.8% to 91.6%), 24 months (from 90.8% to 89.4%) and 60 months (from 93.3% to 92.7%). (Table 1). Trends in fully vaccinated coverage by quarter from 2015 to 2024 are shown in Figure A1 in the Appendix. Fully vaccinated coverage for 2024 at the three age milestones is also provided by PHN and jurisdiction in Table A3 in the Appendix. Coverage estimates in this report may differ from estimates published elsewhere using different methods, for example calculation using rolling annualised quarterly coverage data.

Coverage by individual vaccines/antigens

Coverage for all individual vaccines/antigens at 12 months of age decreased between 2023 and 2024 by 0.9–1.2 percentage points (Table 1). Coverage for vaccines/antigens included in the 12-month fully vaccinated algorithm (see Table A2 in the Appendix for definition) was 92.2%–94.0% in 2024. Coverage for the second dose of rotavirus vaccine, which is not included in the 12-month fully vaccinated algorithm due to upper age limits, decreased by 0.9 of a percentage point, from 89.4% to 88.5%. Trends in individual vaccine/antigen coverage at 12 months of age by quarter from 2015 to 2024 are shown in Figure A2 in the Appendix.

Coverage for all individual vaccines/antigens included in the 24-month fully vaccinated algorithm (see Table A2 in the Appendix for definition) decreased between 2023 and 2024 by 0.7–1.2 of a percentage point to be 90.7%–95.0% in 2024 (Table 1). Trends in individual vaccine/antigen coverage at 24 months of age by quarter from 2015 to 2024 are shown in Figure A3 in the Appendix.

Coverage for individual vaccines/antigens included in the 60-month fully vaccinated algorithm (see Table A2 in the Appendix for definition) decreased between 2023 and 2024, from 93.5% to 92.9% for the fourth (or fifth) dose of DTPa and from 93.6% to 93.1% for the fourth dose of polio (Table 1). Trends in individual vaccine/antigen coverage at 60 months of age by quarter from 2015 to 2024 are shown in Figure A4 in the Appendix.

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Table 1. Vaccination coverage in children by vaccine/antigen and age assessment milestone, Australia, 2023 and 2024

Vaccine/antigen	Milestone age	Coverage (%)		
		2023	2024	Difference¶
Fully vaccinated*	12 months†	92.8	91.6	-1.2
	24 months‡	90.8	89.4	-1.4
	60 months§	93.3	92.7	-0.6
Diphtheria-tetanus-pertussis	12 months† (dose 3)	93.3	92.2	-1.1
	24 months‡ (dose 4)	91.9	90.7	-1.2
	60 months§ (dose 4 or 5)	93.5	92.9	-0.6
Polio	12 months† (dose 3)	93.3	92.1	-1.2
	24 months‡ (dose 3)	95.8	95.0	-0.8
	60 months§ (dose 4)	93.6	93.1	-0.5
Haemophilus influenzae type b	12 months† (dose 3)	93.3	92.1	-1.2
	24 months‡ (dose 4)	92.7	91.5	-1.2
	60 months§ (dose 4)	95.8	95.5	-0.3
Hepatitis B	12 months† (dose 3)	93.2	92.0	-1.2
	24 months‡ (dose 3)	95.6	94.8	-0.8
	60 months§ (dose 3)	96.6	96.5	-0.1
Measles-mumps-rubella	12 months	N/A	N/A	N/A
	24 months‡ (dose 1)	94.7	94.0	-0.7
	24 months‡ (dose 2)	92.5	91.4	-1.1
	60 months§ (dose 2)	96.4	96.1	-0.3
Varicella	12 months	N/A	N/A	N/A
	24 months‡ (dose 1)	92.5	91.4	-1.1
	60 months§ (dose 1)	96.3	96.0	-0.3
Meningococcal C-containing	12 months	N/A	N/A	N/A
	24 months‡ (dose 1)	94.7	93.9	-0.8
	60 months§ (dose 1)	N/A	N/A	N/A
Meningococcal ACWY	24 months‡ (dose 1)	94.4	93.5	-0.9
13vPCV	12 months† (dose 2 or 3)	95.0	94.0	-1.0

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Vaccine/antigen	Milestone age	Coverage (%)		
		2023	2024	Difference¶
	24 months‡ (dose 3 or 4)	94.4	93.5	-0.9
	60 months§ (dose 3 or 4)	95.3	95.0	-0.3
Rotavirus	12 months† (dose 2)	89.4	88.5	-0.9
	24 months	N/A	N/A	N/A
	60 months	N/A	N/A	N/A

* Refer to the Appendix for details of fully vaccinated assessment algorithms used in this report (Table A2). Coverage estimates in this table are calculated using 12-month-wide cohorts and may differ from estimates published elsewhere using different methods e.g. rolling annualised quarterly coverage data

† Cohort born 1 January 2022–31 December 2022 (2023 estimate – i.e. vaccines due from mid-2022 to mid-2023) and 1 January 2023–31 December 2023 (2024 estimate – i.e. vaccines due from mid-2023 to mid-2024)

‡ Cohort born 1 January 2021–31 December 2021 (2023 estimate – i.e. vaccines due from mid-2021 [6-month doses] to mid-2023 [18-month doses]) and 1 January 2022–31 December 2022 (2024 estimate – i.e. vaccines due from mid-2022 [6-month doses] to mid-2024 [18-month doses])

§ Cohort born 1 January 2018–31 December 2018 (2023 estimate – i.e. vaccines due in 2022) and 1 January 2019–31 December 2019 (2024 estimate – i.e. vaccines due in 2023)

¶ Percentage points difference between 2023 and 2024

N/A = Not applicable; vaccine either not given prior to this milestone or contraindicated after previous milestone age

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 coverage) and 2 February 2025 (for 2024 coverage)

Small area coverage analysis

Childhood vaccination coverage in 2024 at SA3 level varied across Australia. Coverage in some areas was substantially below the national average – especially the North Coast region of New South Wales and the Gold Coast and Sunshine Coast regions of Queensland (Figure 1, Figure 2 and Figure 3). Coverage of 95% or higher at 12 months of age was achieved for 40% (132/330) of SA3 areas for the second dose of diphtheria-tetanus-pertussis (DTPa)-containing vaccine (Figure 1). Coverage of 95% or higher at 24 months of age was achieved for 36.1% (119/330) of SA3 areas for the first dose of measles-mumps-rubella (MMR)-containing vaccine (Figure 2) but only 7.6% (25/330) of SA3 areas for the second dose of MMR-containing vaccine (Figure 3).

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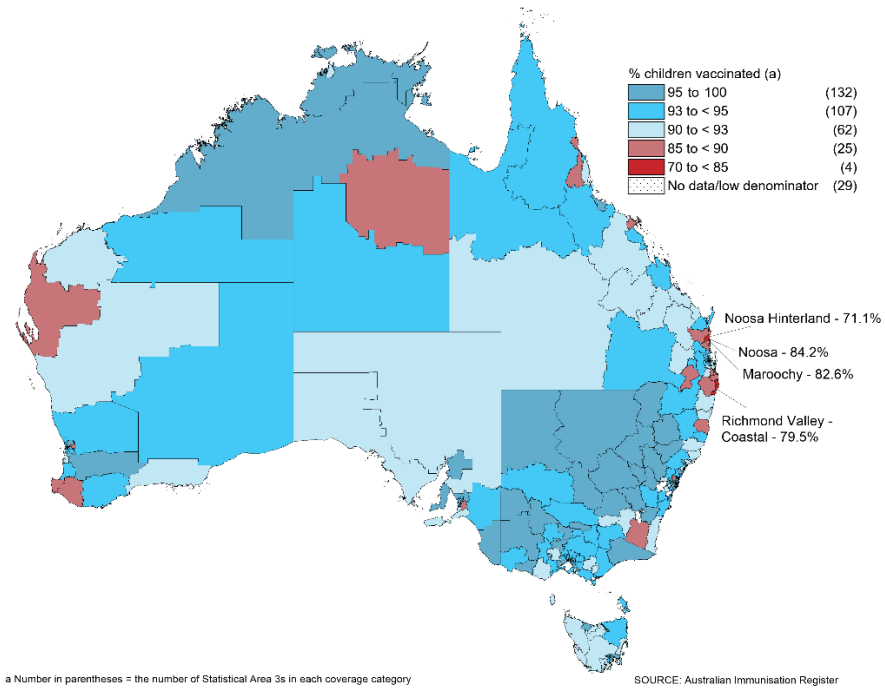
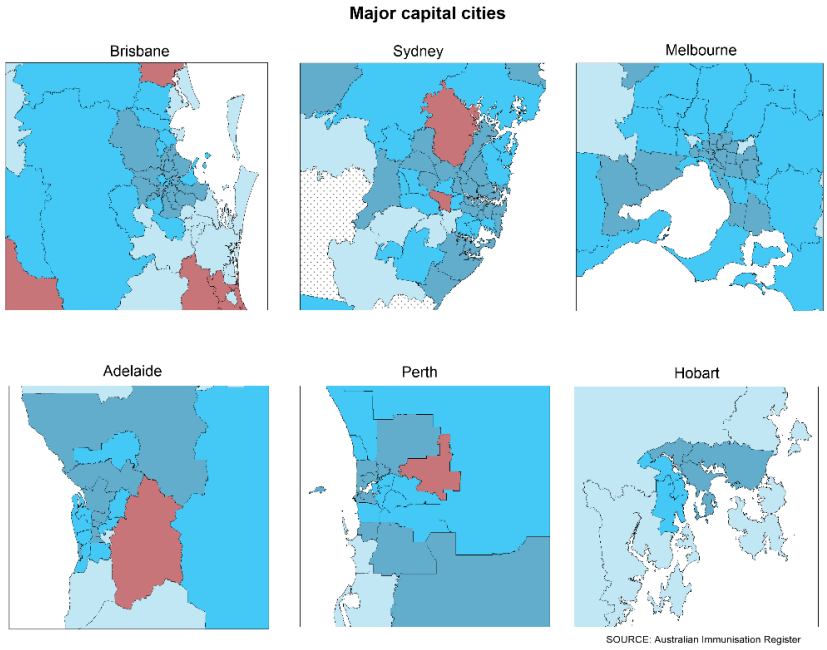
Figure 1. Coverage of the second dose of diphtheria-tetanus-pertussis (DTPa)-containing vaccine at 12 months of age* by Statistical Area 3, Australia and major capital cities, 2024





* Cohort born 1 January 2023–31 December 2023 (i.e. due their second dose of DTPa from mid-2023 to mid-2024)

Source: Australian Immunisation Register data as at 2 February 2025

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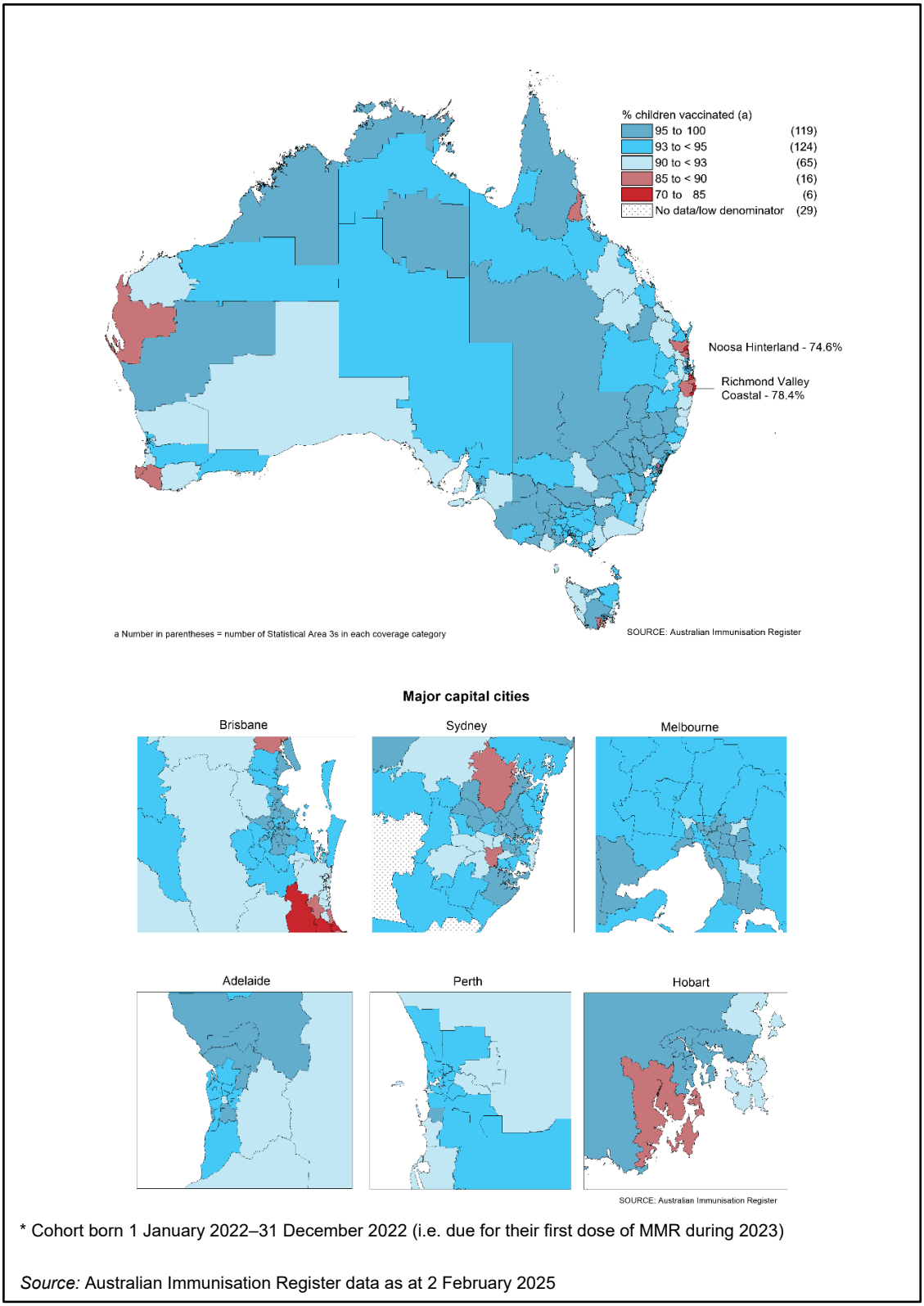
Figure 2. Coverage of the first dose of measles-mumps-rubella (MMR)-containing vaccine at 24 months of age* by Statistical Area 3, Australia and major capital cities, 2024



* Cohort born 1 January 2022–31 December 2022 (i.e. due for their first dose of MMR during 2023)

Source: Australian Immunisation Register data as at 2 February 2025

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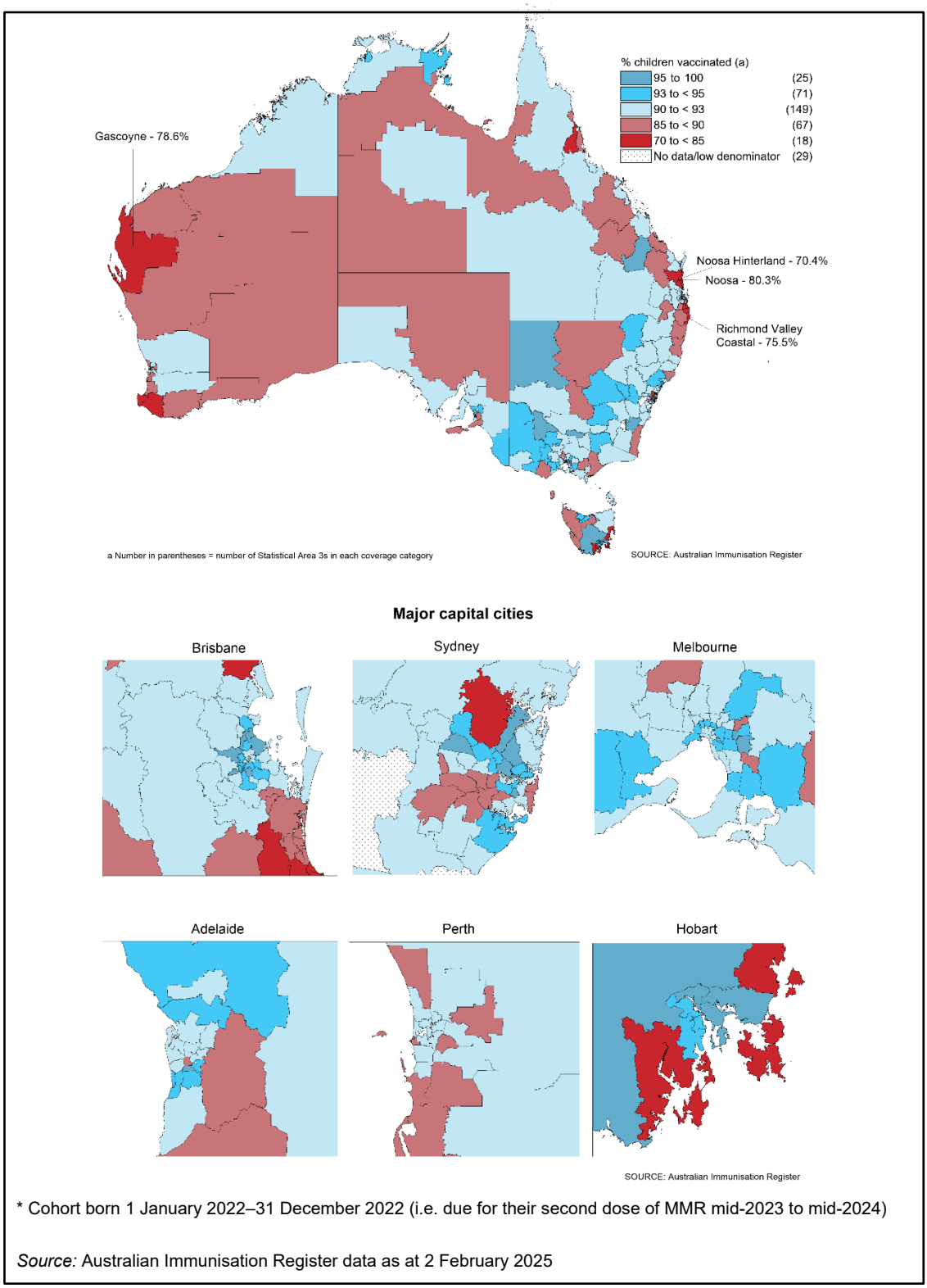
Figure 3. Coverage of the second dose of measles-mumps-rubella (MMR)-containing vaccine at 24 months of age* by Statistical Area 3, Australia and major capital cities, 2024



* Cohort born 1 January 2022–31 December 2022 (i.e. due for their second dose of MMR mid-2023 to mid-2024)

Source: Australian Immunisation Register data as at 2 February 2025

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Influenza vaccination coverage

Influenza vaccination coverage in children aged 6 months to <5 years decreased from 30.3% in 2023 to 27.6% in 2024 (Figure 4); in children aged 5 to <10 years, it decreased from 17.9% to 15.6% (Figure 5). Coverage for children aged 6 months to <5 years decreased in all jurisdictions except in the Northern Territory, with the largest decrease seen in Western Australia (from 28.8% in 2023 to 22.9% in 2024). There was substantial variation in recorded coverage for children aged 6 months to <5 years by jurisdiction in 2024, ranging from 22.9% in Western Australia to 52.1% in the Australian Capital Territory (Figure 4). Influenza vaccination coverage in children aged 6 months to <5 years in 2024 at the SA3 level varied across Australia (Figure 6). Coverage was highest in SA3s in the Northern Territory, as high as 65.7% in the Daly-Tiwi-West Arnhem SA3 and 53.8% in Alice Springs, and also relatively high in inner areas of major capital cities compared with outer areas (Figure 6). Influenza vaccination coverage in children aged 6 months to <5 years was below 15% in 36 of the 333 SA3s in Australia, including Whitsunday (7.2%), Richmond Valley – Coastal (10.6%), Noosa (10.9%) and Gympie-Colloola (9.4%). All of which are in south-east Queensland and northern New South Wales (Figure 6).

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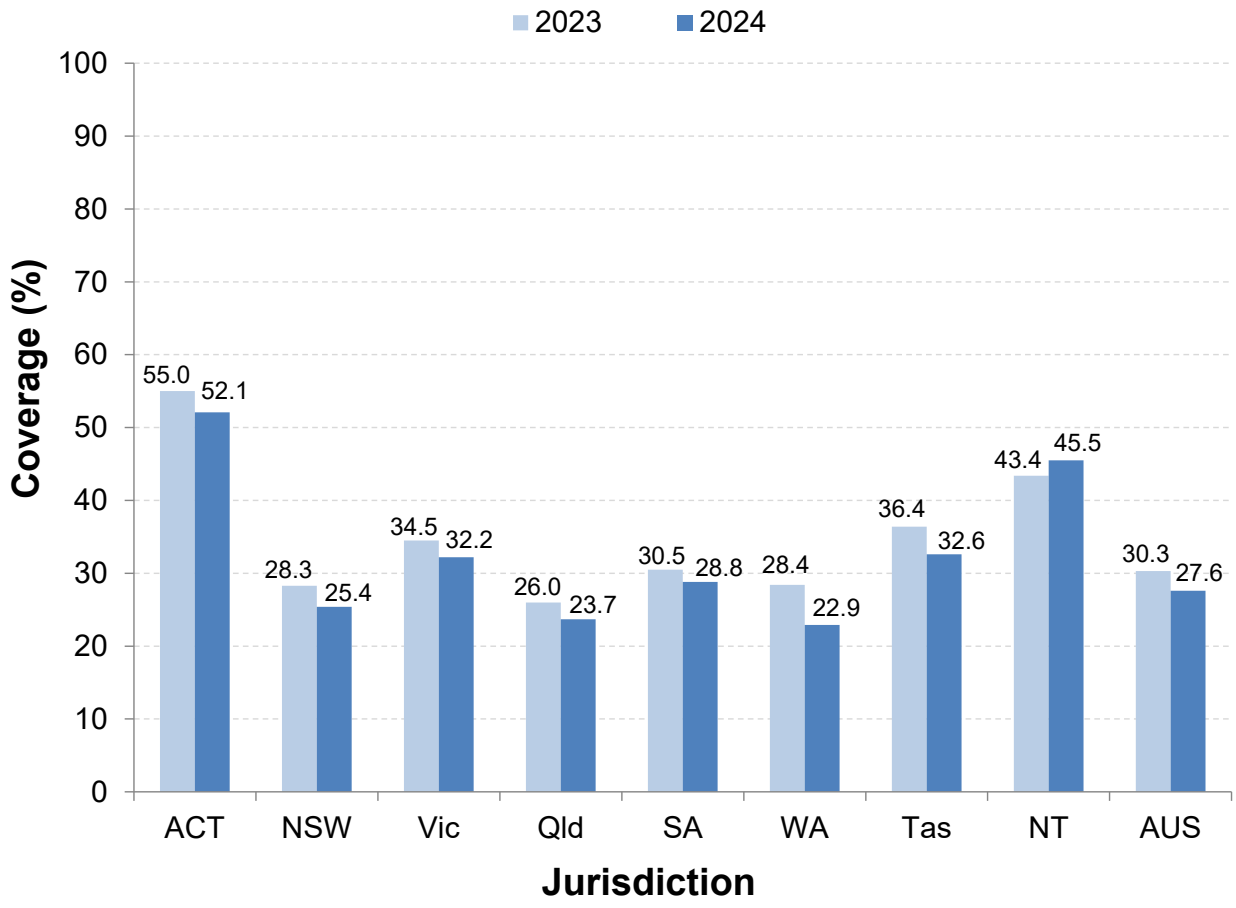
Figure 4. Coverage* of seasonal influenza vaccine in children aged 6 months to <5 years by jurisdiction, Australia, 2023 and 2024



* Coverage calculated by dividing the number of Medicare-registered children aged 6 months to <5 years with at least one dose of influenza vaccine administered in the calendar year of interest by the total number of Medicare-registered children in the 6 months to <5 years age group. Vaccination numerators based on age at vaccination and age group denominators based on age at 30 June in relevant year. Coverage data in this figure may differ from estimates published elsewhere due to differences in calculation methodologies and/or the AIR data being used in the calculation having been downloaded on different dates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and as at 2 February 2025 (for 2024 data)

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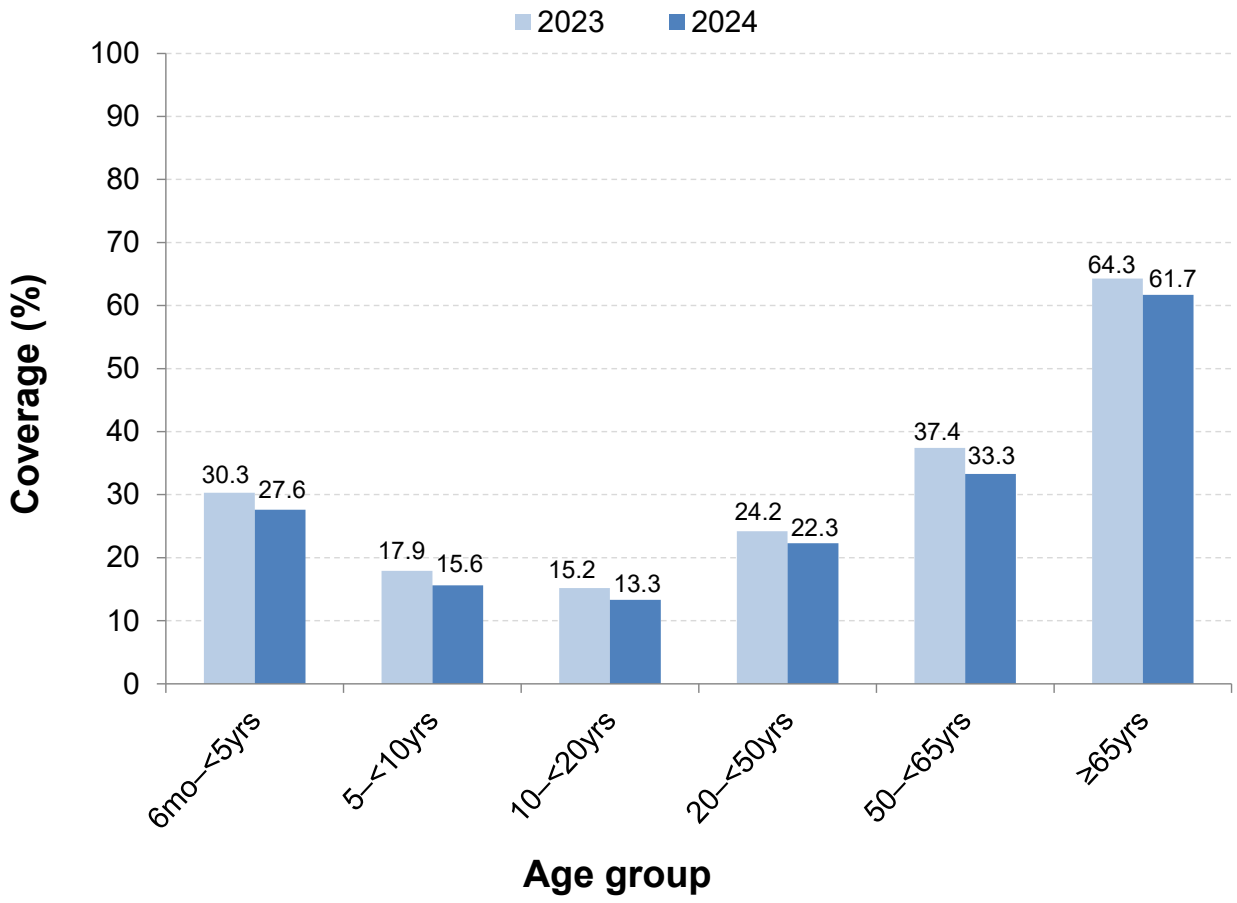
Figure 5. Coverage* of seasonal influenza vaccine by age group, Australia, 2023 and 2024



* Coverage calculated by dividing the number of Medicare-registered people with at least one dose of influenza vaccine administered in the calendar year of interest by the total number of Medicare-registered people registered in each age group. Vaccination numerators based on age at vaccination and age group denominators based on age at 30 June in relevant year. Coverage data in this figure may differ from estimates published elsewhere due to differences in calculation methodologies and/or the AIR data being used in the calculation having been downloaded on different dates.

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and as at 2 February 2025 (for 2024 data)

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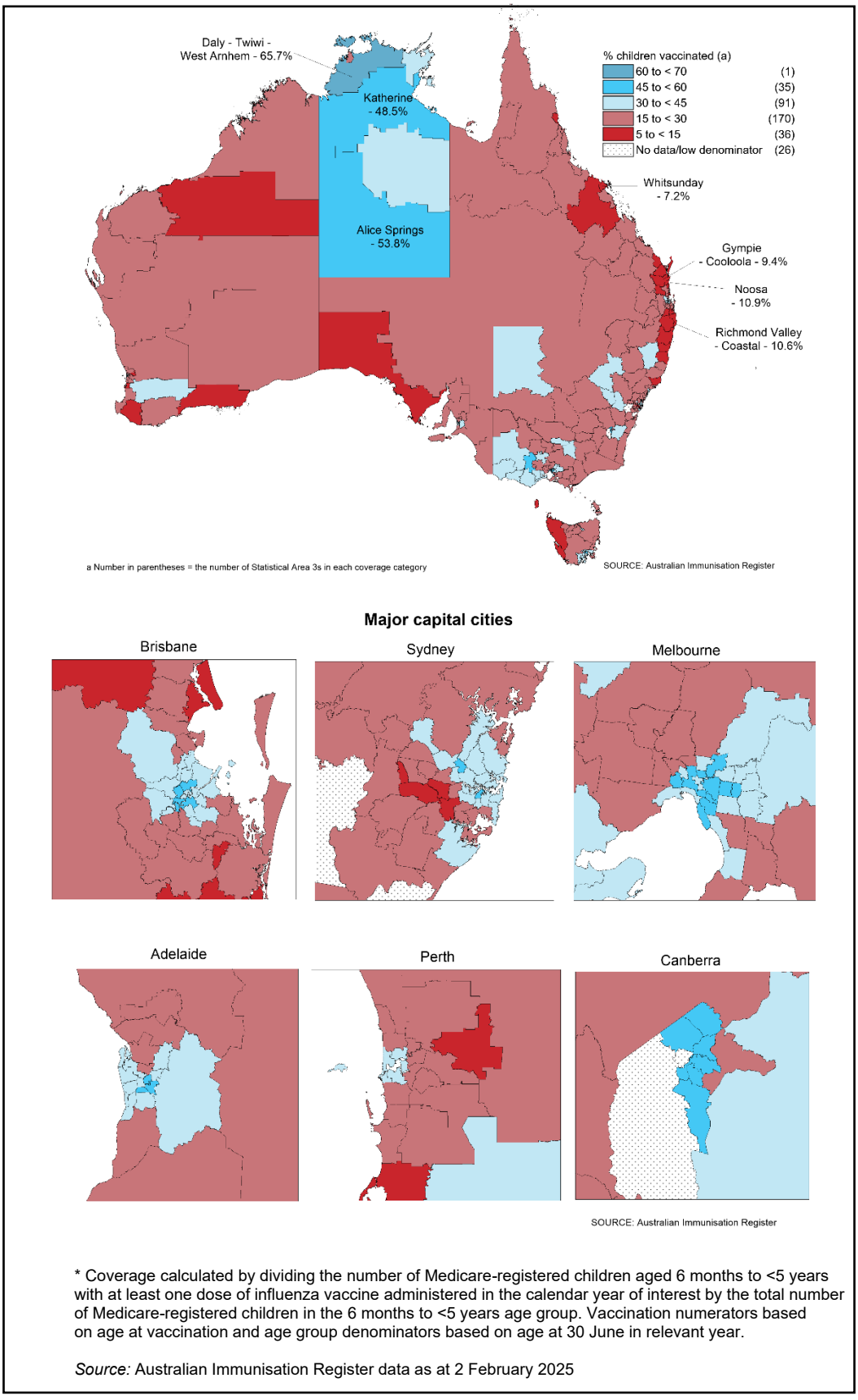
Figure 6. Coverage* of seasonal influenza vaccine in children aged 6 months to <5 years by Statistical Area 3, Australia, 2024



* Coverage calculated by dividing the number of Medicare-registered children aged 6 months to <5 years with at least one dose of influenza vaccine administered in the calendar year of interest by the total number of Medicare-registered children in the 6 months to <5 years age group. Vaccination numerators based on age at vaccination and age group denominators based on age at 30 June in relevant year.

Source: Australian Immunisation Register data as at 2 February 2025

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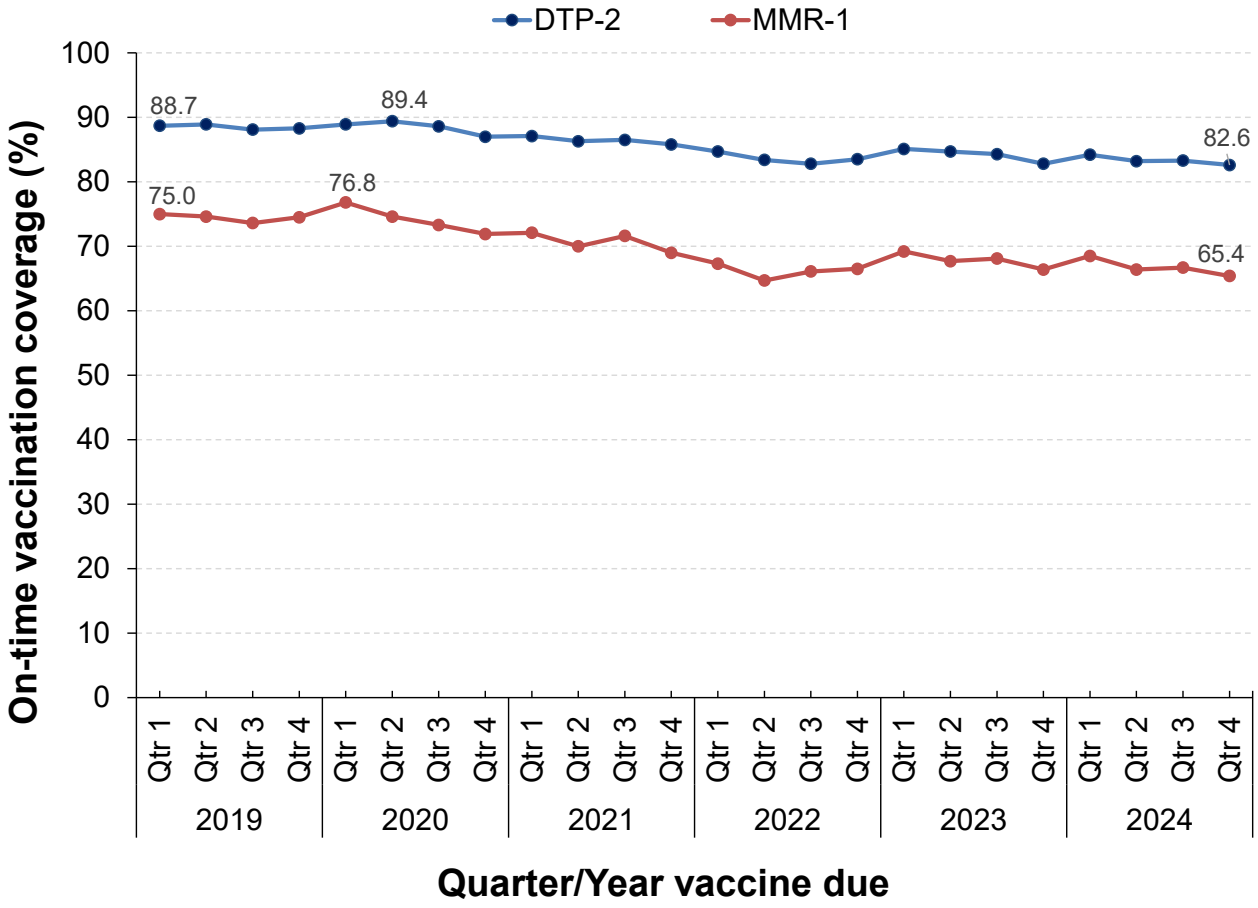
Timeliness of vaccination

The proportion of children vaccinated on time (within 30 days of the recommended age) with the second dose of DTPa-containing vaccine was 6.1 percentage points lower in the last quarter of 2024 than the first quarter of 2019 (82.6% versus 88.7%) (Figure 7).The proportion of those vaccinated on time with the first dose of MMR-containing vaccine was 9.6 percentage points lower in the last quarter of 2024 than the first quarter of 2019 (65.4% versus 75.0%) (Figure 7).

Figure 7. Trends in 'on-time' vaccination coverage* for the second dose of DTPa-containing vaccine and first dose of MMR-containing vaccine in children by quarter,† Australia, 2019–2024



* On-time vaccination coverage calculated using 3-month-wide birth cohorts due to have received the vaccine in the relevant quarter/year. For DTPa, to be considered on-time, a child must have received the second dose of DTPa-containing vaccine by 5 months of age. For MMR, to be considered on-time, a child must have received the first dose of MMR vaccine by 13 months of age.

† The quarter in which the vaccine dose is due is used to define the birth cohorts (e.g. if the second dose of DTPa-containing vaccine was due in 2024: children born 1 September 2023–30 November 2023 were due in Quarter 1, children born 1 December 2023–28 February 2024 were due in Quarter 2, children born 1 March 2024–31 May 2024 were due in Quarter 3 and children born 1 June 2024–31 August 2024 were due in Quarter 4)

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Source: Australian Immunisation Register data as at 2 February 2025

On-time vaccination coverage in 2024 for the first dose of MMR-containing vaccine at SA3 level varied across Australia (Figure 8). Coverage in many remote areas of Western, Central and Northern Australia was substantially lower than in South East Australia, with 49.8% on-time vaccination in Katherine, 50.0% in Far North Queensland and 53.2% in the Kimberley. Fully vaccinated coverage for children by PHN and jurisdiction in 2024, assessed at the standard (12, 24 and 60 months) and at earlier (9-, 15-, 21- and 51-month) age milestones to capture other aspects of timeliness, are provided in Table A3 in the Appendix.

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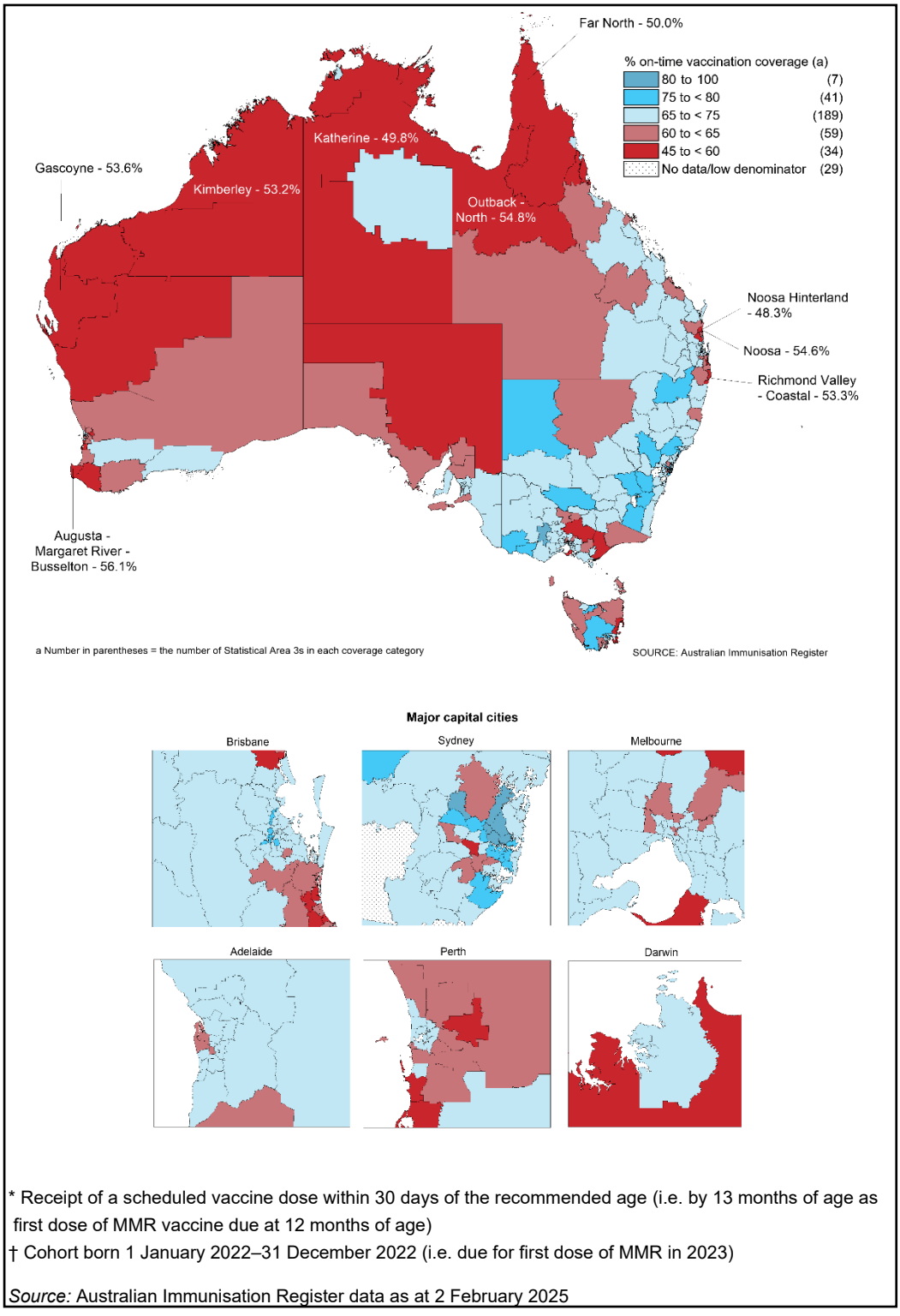
Figure 8. 'On-time'* vaccination coverage of first dose of MMR-containing vaccine assessed at 13 months of age† by Statistical Area 3, Australia, 2024



* Receipt of a scheduled vaccine dose within 30 days of the recommended age (i.e. by 13 months of age as first dose of MMR vaccine due at 12 months of age)

† Cohort born 1 January 2022–31 December 2022 (i.e. due for first dose of MMR in 2023)

Source: Australian Immunisation Register data as at 2 February 2025

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Aboriginal and Torres Strait Islander children

Coverage at 12, 24 and 60 months of age

Fully vaccinated

Between 2023 and 2024, fully vaccinated coverage for Aboriginal and Torres Strait Islander children decreased at all three age milestones: 12 months (from 89.7% to 89.2%), 24 months (from 87.8% to 86.7%) and 60 months (95% to 94.4%) (Table 2).

Trends in fully vaccinated coverage for Aboriginal and Torres Strait Islander children by quarter from 2015 to 2024 are shown in Figure A5 in the Appendix.

Coverage by individual vaccines/antigens at 12, 24 and 60 months of age

Coverage at 12 months of age in Aboriginal and Torres Strait Islander children decreased for all individual vaccines/antigens (except rotavirus vaccine) between 2023 and 2024, by 0.5–0.6 of a percentage point (Table 2). Rotavirus vaccine coverage increased by 0.3 of a percentage point between 2023 and 2024 (Table 2).

Between 2023 and 2024, coverage at 24 months of age in Aboriginal and Torres Strait Islander children decreased for all individual vaccines/antigens by 0.2–1.2 percentage points. (Table 2).

Coverage at 60 months of age in Aboriginal and Torres Strait Islander children in 2024 decreased, for all individual vaccines/antigens between 2023 and 2024, by 0.1–1.2 percentage points. However, it remained over 95% for all except for diphtheria-tetanus-pertussis and polio vaccines (Table 2).

Table 2. Vaccination coverage in Aboriginal and Torres Strait Islander children by vaccine/antigen and age assessment milestone, Australia, 2023 and 2024

Vaccine/antigen	Milestone age	Coverage (%)		
		2023	2024	Difference[¶]
Fully vaccinated*	12 months[†]	89.7	89.2	-0.5
	24 months[‡]	87.8	86.7	-1.1
	60 months[§]	95.0	94.4	-0.6
Diphtheria-tetanus-pertussis	12 months[†] (dose 3)	89.9	89.4	-0.5
	24 months[‡] (dose 4)	89.1	88.0	-1.1

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Vaccine/antigen	Milestone age	Coverage (%)		
		2023	2024	Difference¶
	60 months§ (dose 4 or 5)	95.3	94.6	-0.7
Polio	12 months† (dose 3)	89.9	89.4	-0.5
	24 months‡ (dose 3)	95.6	95.3	-0.3
	60 months§ (dose 4)	95.1	94.5	-0.6
Haemophilus influenzae type b	12 months† (dose 3)	89.9	89.4	-0.5
	24 months‡ (dose 4)	91.1	90.0	-1.1
	60 months§ (dose 4)	98.1	97.6	-0.5
Hepatitis B	12 months† (dose 3)	89.9	89.3	-0.6
	24 months‡ (dose 3)	95.5	95.2	-0.3
	60 months§ (dose 3)	98.4	98.2	-0.2
Measles-mumps-rubella	12 months	N/A	N/A	N/A
	24 months‡ (dose 1)	94.9	94.7	-0.2
	24 months‡ (dose 2)	90.7	89.5	-1.2
	60 months§ (dose 2)	98.3	97.9	-0.4
Varicella	12 months	N/A	N/A	N/A
	24 months‡ (dose 1)	90.6	89.5	-1.1
	60 months§ (dose 1)	98.3	97.9	-0.4
Meningococcal C-containing	12 months	N/A	N/A	N/A
	24 months‡ (dose 1)	95.4	95.1	-0.3
	60 months§ (dose 1)	N/A	N/A	N/A
Meningococcal ACWY	24 months‡ (dose 1)	95.4	95.0	-0.4
13vPCV	12 months† (dose 2 or 3)	94.9	94.4	-0.5
	24 months‡ (dose 3 or 4)	94.7	94.3	-0.4
	60 months§ (dose 3 or 4)	97.3	97.2	-0.1
Rotavirus	12 months† (dose 2)	82.5	82.8	0.3
	24 months	N/A	N/A	N/A
	60 months	N/A	N/A	N/A

* Refer to the Appendix for details of fully vaccinated assessment algorithms used in this report (Table A2). Coverage estimates in this table are calculated using 12-month-wide cohorts and may differ from estimates using different methods e.g. rolling annualised quarterly coverage data

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† Cohort born 1 January 2022–31 December 2022 (2023 estimate – i.e. vaccines due from mid-2022 to mid-2023) and 1 January 2023–31 December 2023 (2024 estimate – i.e. vaccines due from mid-2023 to mid-2024)
‡ Cohort born 1 January 2021–31 December 2021 (2023 estimate – i.e. vaccines due from mid-2021 [6-month doses] to mid-2023 [18-month doses]) and 1 January 2022–31 December 2022 (2024 estimate – i.e. vaccines due from mid-2022 [6-month doses] to mid-2024 [18-month doses])
§ Cohort born 1 January 2018–31 December 2018 (2023 estimate – i.e. vaccines due in 2022) and 1 January 2019–31 December 2019 (2024 estimate – i.e. vaccines due in 2023)
N/A = Not applicable; vaccine either not given prior to this milestone or contraindicated after previous milestone
¶ Percentage points difference

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 coverage) and 2 February 2025 (for 2024 coverage)

Influenza vaccination coverage

Influenza vaccination coverage in Aboriginal and Torres Strait Islander children decreased from 23.1% in 2023 to 21.0% in 2024 in those aged 6 months to <5 years (Figure 9) and from 14.6% to 12.6% in those aged 5 to <10 years (Figure 10). Coverage in Aboriginal and Torres Strait Islander children aged 6 months to <5 years decreased in all jurisdictions except the Australian Capital Territory. There was substantial variation in coverage for Aboriginal and Torres Strait Islander children aged 6 months to <5 years by jurisdiction in 2024, ranging from 17.8% in Queensland to 48.6% in the Northern Territory (Figure 9).

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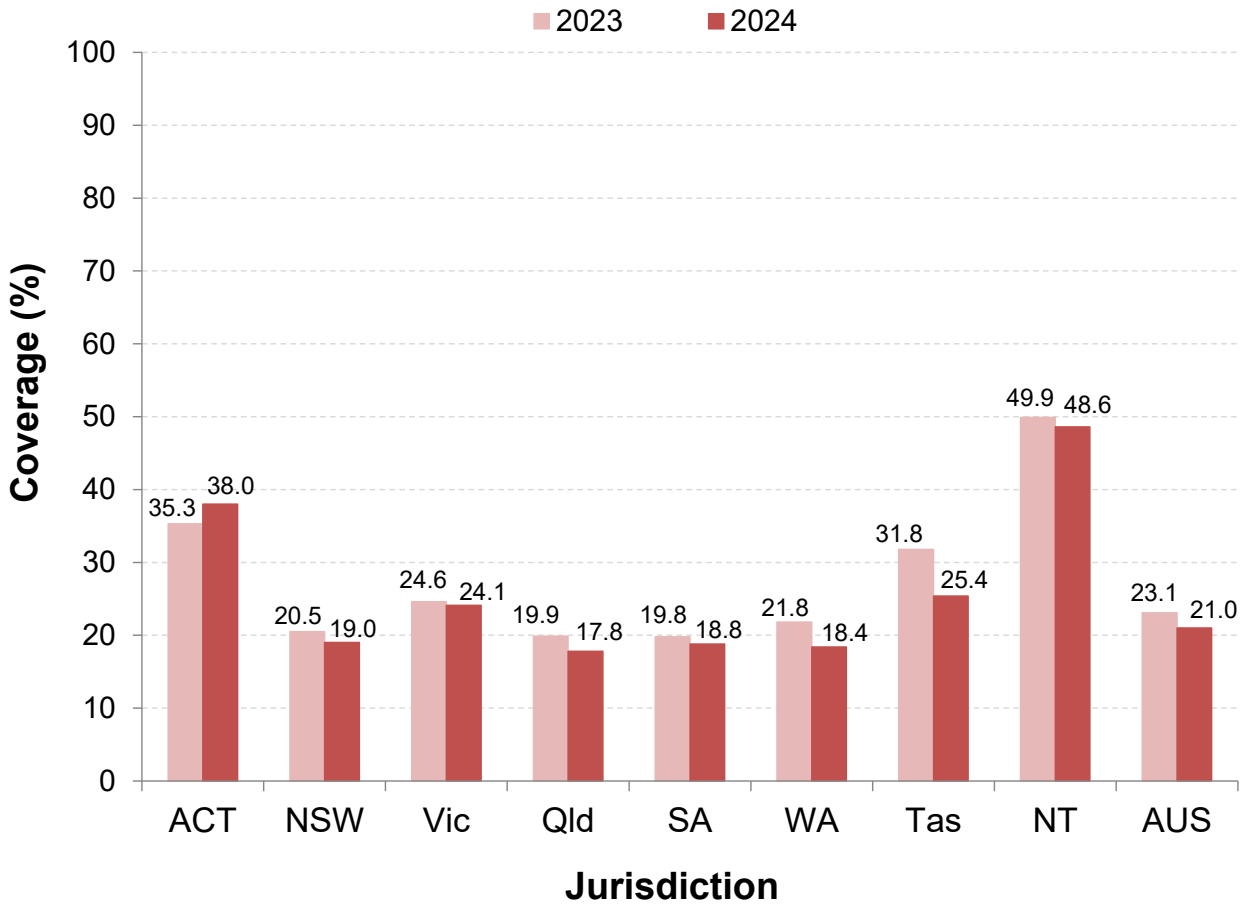
Figure 9. Coverage of seasonal influenza vaccine* in Aboriginal and Torres Strait Islander children aged 6 months to <5 years by jurisdiction, Australia, 2023 and 2024



* Coverage calculated by dividing the number of Medicare-registered children aged 6 months to <5 years with at least one dose of influenza vaccine administered in the calendar year of interest by the total number of Medicare-registered children in the 6 months to <5 years age group. Vaccination numerators based on age at vaccination and age group denominators based on age at 30 June in relevant year. Coverage data in this figure may differ from estimates published elsewhere due to differences in calculation methods and/or the AIR data being used in the calculation having been downloaded on different dates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and as at 2 February 2025 (for 2024 data)

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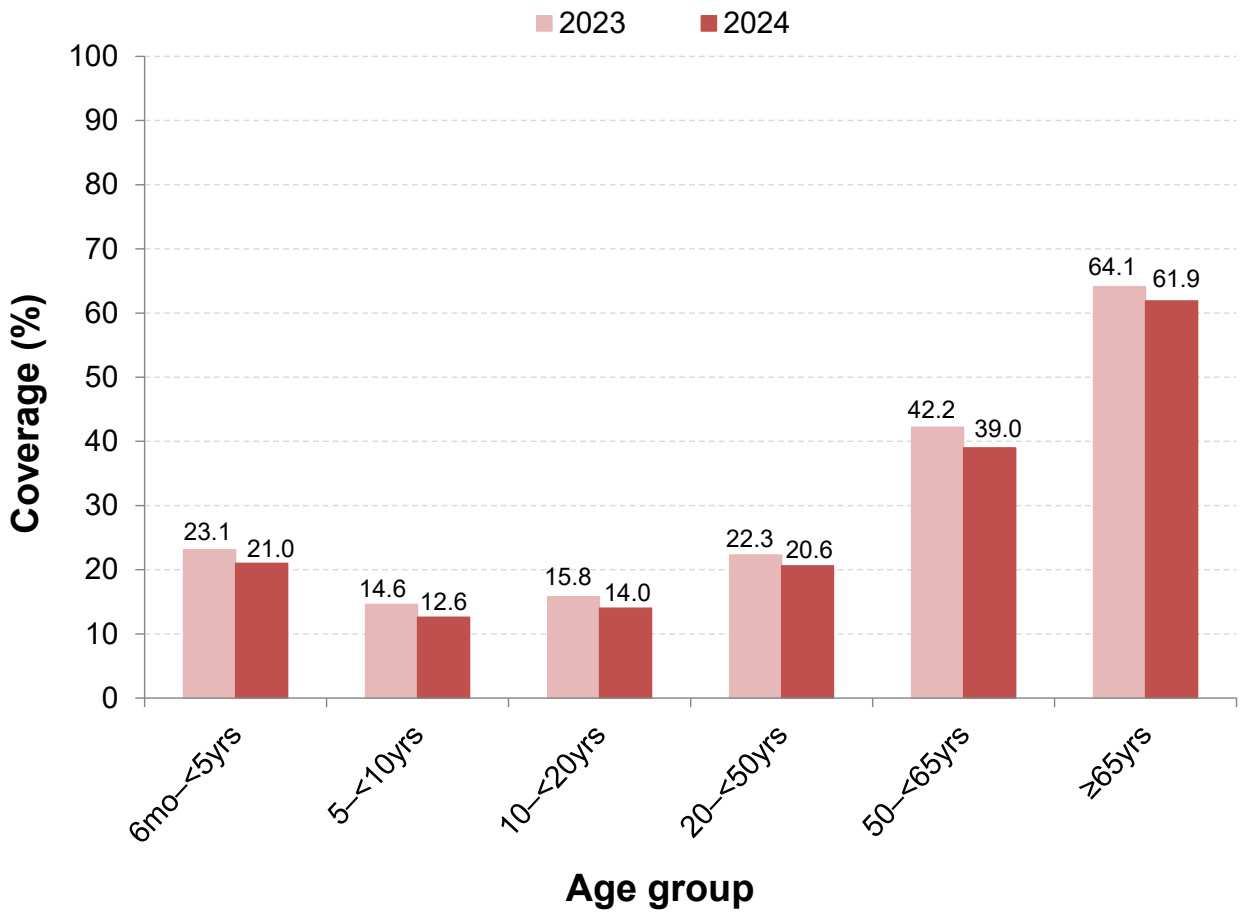
Figure 10. Coverage* of seasonal influenza vaccine in Aboriginal and Torres Strait Islander persons by age group, Australia, 2023 and 2024



* Coverage calculated by dividing the number of Medicare-registered people with at least one dose of influenza vaccine administered in the calendar year of interest by the total number of Medicare-registered people registered in each age group. Vaccination numerators based on age at vaccination and age group denominators based on age at 30 June in relevant year. Coverage data in this figure may differ from estimates published elsewhere due to differences in calculation methods and/or the AIR data being used in the calculation having been downloaded on different dates

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and as at 2 February 2025 (for 2024 data)

Meningococcal B vaccination coverage

Meningococcal B vaccination coverage in 2024 for the cohort of Aboriginal and Torres Strait Islander children born in 2022 and eligible to have received doses at 2, 4 and 12 months of age by 24 months of age is shown in Figure 11. Nationally, 83.0% of this cohort had received their first dose of meningococcal B vaccine, 80.9% their second dose and 75.0% their third dose. Coverage for each dose was highest in South Australia and the Northern Territory and lowest in Victoria and Tasmania (Figure 11). Completion of the meningococcal B vaccination schedule (i.e. receipt of three doses if dose 1 was received before 12 months of age or receipt of

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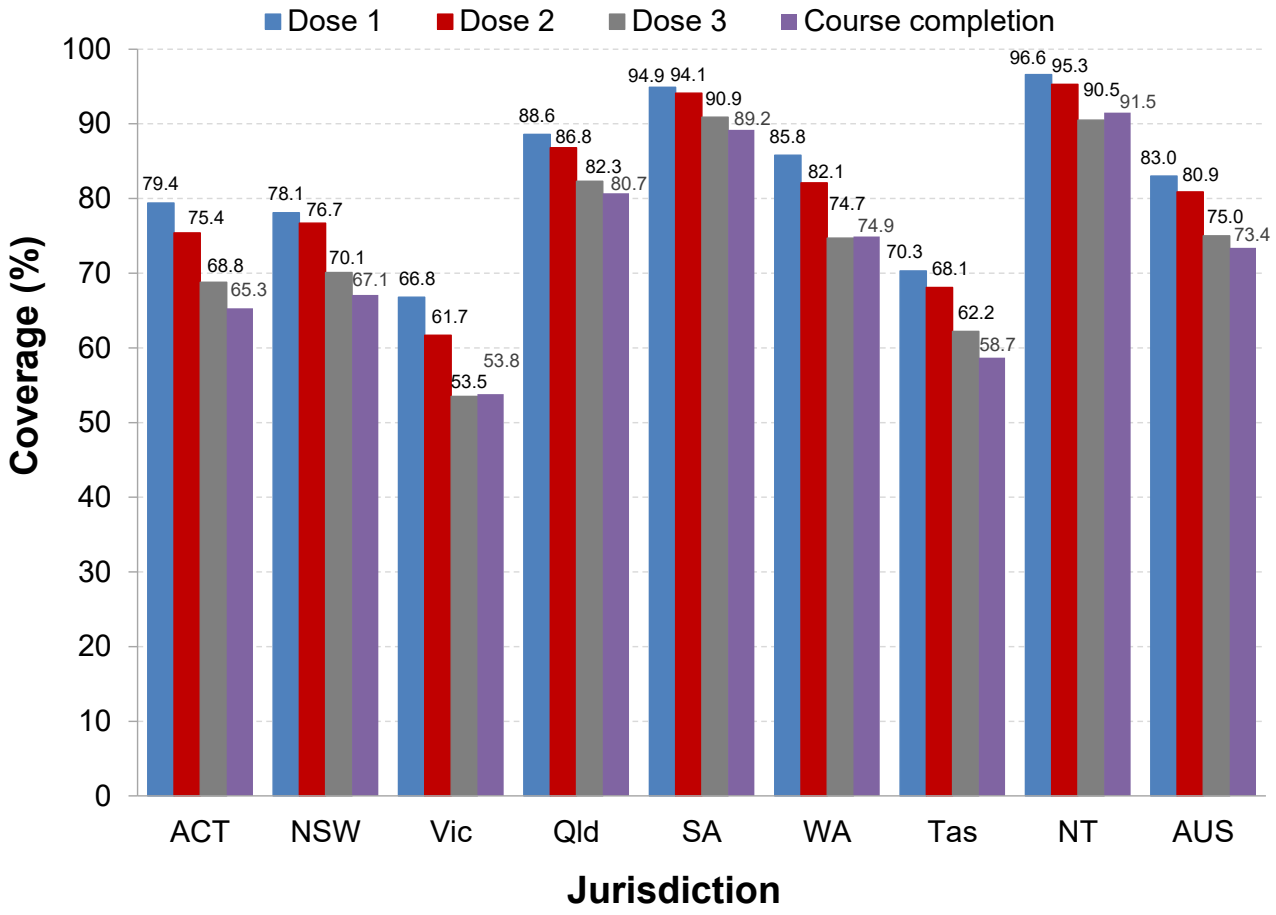
two doses if dose 1 was received after 12 months of age) was 73.4% nationally and varied substantially by jurisdiction, ranging from 53.8% in Victoria to 91.5% in the Northern Territory (Figure 11).

Figure 11. Coverage of meningococcal B vaccine in Aboriginal and Torres Strait Islander children,* dose number and course completion by jurisdiction, Australia, 2024



* Coverage assessed by 24 months of age for cohort of Aboriginal and Torres Strait Islander children born 1 January 2022–31December 2022. Only two doses of meningococcal B vaccine are required if the first dose is administered after 12 months of age

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025

Hepatitis A vaccination coverage

Coverage of the second dose of hepatitis A vaccine by 60 months of age for the four jurisdictions (combined) where it has been funded under the NIP for Aboriginal and Torres Strait Islander children since 2005 (Northern Territory, Queensland, South Australia and Western Australia) was 70.8% in December 2024. However, note that this is the first year since 2020 that coverage of the

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second dose by 60 months of age has been able to be calculated as there was a change in the schedule point for this dose in July 2020 from either 18 or 24 months (depending on jurisdiction) to 4 years of age. Trends in hepatitis A vaccination coverage by quarter from 2015 to 2024 are provided in Figure A6 in the Appendix and show the highest coverage levels consistently achieved in the Northern Territory (85.5% for dose 2 in the December 2024 quarter).

Pneumococcal vaccination coverage

Coverage for the additional fourth dose of 13vPCV by 30 months of age – for the four jurisdictions (combined) where it is funded for Aboriginal and Torres Strait Islander children (Northern Territory, Queensland, South Australia and Western Australia) – decreased from 80.5% in December 2023 to 78.0% in December 2024 (Figure A7 in the Appendix). Longer-term trends in 13vPCV fourth-dose coverage and by jurisdiction (Figure A7 in the Appendix) show the highest coverage levels are consistently achieved in the Northern Territory (87.3% in the December 2024 quarter).

Timeliness of vaccination

The proportion of Aboriginal and Torres Strait Islander children vaccinated on time with the second dose of DTPa-containing vaccine (within 30 days of the recommended age) was 7.7 percentage points lower in the last quarter of 2024 than the first quarter of 2019 (73.0% versus 80.7%) (Figure 12). The proportion of those vaccinated on time with the first dose of MMR-containing vaccine was 12.1 percentage points lower in the last quarter of 2024 than the first quarter of 2019 (55.3% versus 67.4%) (Figure 12). Fully vaccinated coverage for Aboriginal and Torres Strait Islander children by PHN and jurisdiction in 2024, assessed at the standard (12, 24 and 60 months) and at earlier (9-, 15-, 21- and 51-month) age milestones to capture other aspects of timeliness, are provided in Table A4 in the Appendix.

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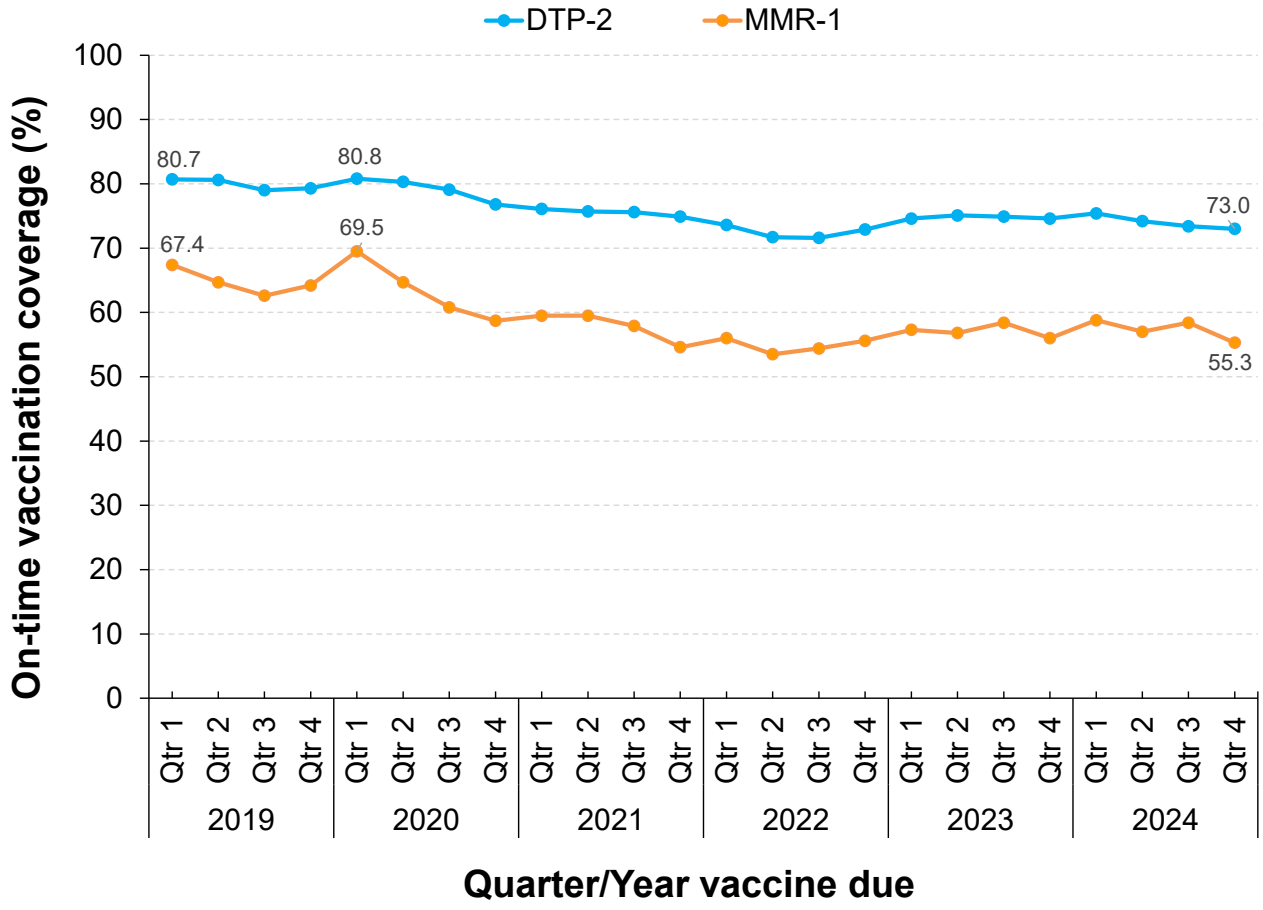
Figure 12. Trends in on-time vaccination coverage* for the second dose of DTPa-containing vaccine and first dose of MMR vaccine, Aboriginal and Torres Strait Islander children by quarter,† Australia, 2019–2024



* On-time vaccination coverage calculated using 3-month-wide birth cohorts due to have received the vaccine in the relevant quarter/year. For DTPa, to be considered on-time, a child must have received the second dose of DTPa-containing vaccine by 5 months of age. For MMR, to be considered on-time, a child must have received the first dose of MMR vaccine by 13 months of age

† The quarter in which the vaccine dose is due is used to define the birth cohorts (e.g. if the second dose of DTPa-containing vaccine was due in 2024: children born 1 September 2023–30 November 2023 were due in Quarter 1, children born 1 December 2023–28 February 2024 were due in Quarter 2, children born 1 March 2024–31 May 2024 were due in Quarter 3 and children born 1 June 2024-31 August 2024 were due in Quarter 4)

Source: Australian Immunisation Register data as at 2 February 2025

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All adolescents

Human papillomavirus vaccination coverage – cohorts turning 15 years

Coverage of at least one dose of human papillomavirus (HPV) vaccine by the fifteenth birthday, the standard World Health Organization assessment milestone age, has decreased each year since 2020 in both girls and boys, with coverage in 2024 being 5.5 and 7.0 percentage points lower than in 2020 at 81.1% and 77.9%, respectively (Figure 13). The largest annual decrease in coverage was between 2023 and 2024, down by 3.1 percentage points in girls and by 3.9 percentage points in boys (Figure 13). Coverage continues to be greater in girls than boys, with the gender disparity increasing from 1.7 percentage points in 2020 to 3.2 percentage points in 2024 (Figure 13).

Coverage of at least one dose of HPV vaccine by the adolescent's fifteenth birthday decreased between 2023 and 2024 for girls and boys in all jurisdictions. In 2024, coverage for girls and boys in the Northern Territory ranged from 76.4% and 67.0%, respectively, and in the Australian Capital Territory from 87.0% and 87.2%, respectively. (Table 3). Coverage in 2024 was below 80% in three jurisdictions for girls (Queensland, South Australia and the Northern Territory) and in all jurisdictions except the Australian Capital Territory and Victoria for boys (Table 3).

Coverage of at least one dose of HPV vaccine by the fifteenth birthday in 2024 was lower in adolescents who resided in remote and very remote areas compared to major cities, with the disparity greater for boys than girls (6.9 percentage points for boys compared to 5.0 percentage points for girls) and greater than in 2023 (2.1 percentage points greater for boys and 1.0 percentage points for girls) (Table 3).

In girls, coverage of at least one dose of HPV vaccine by the fifteenth birthday in 2024 was 7.4 percentage points higher in those living in the most socioeconomically advantaged (fifth quintile) areas than in those living in the most disadvantaged (first quintile) areas (84.3% versus 76.9%), with this disparity 2.1 percentage points greater than in 2023 (Table 3).

In boys, coverage of at least one dose of HPV vaccine by the fifteenth birthday in 2024 was 10.7 percentage points higher in those living in the most socioeconomically advantaged areas than in those living in the most disadvantaged areas (82.6% versus 71.9%), with this disparity 3.0 percentage points greater than in 2023 (Table 3).

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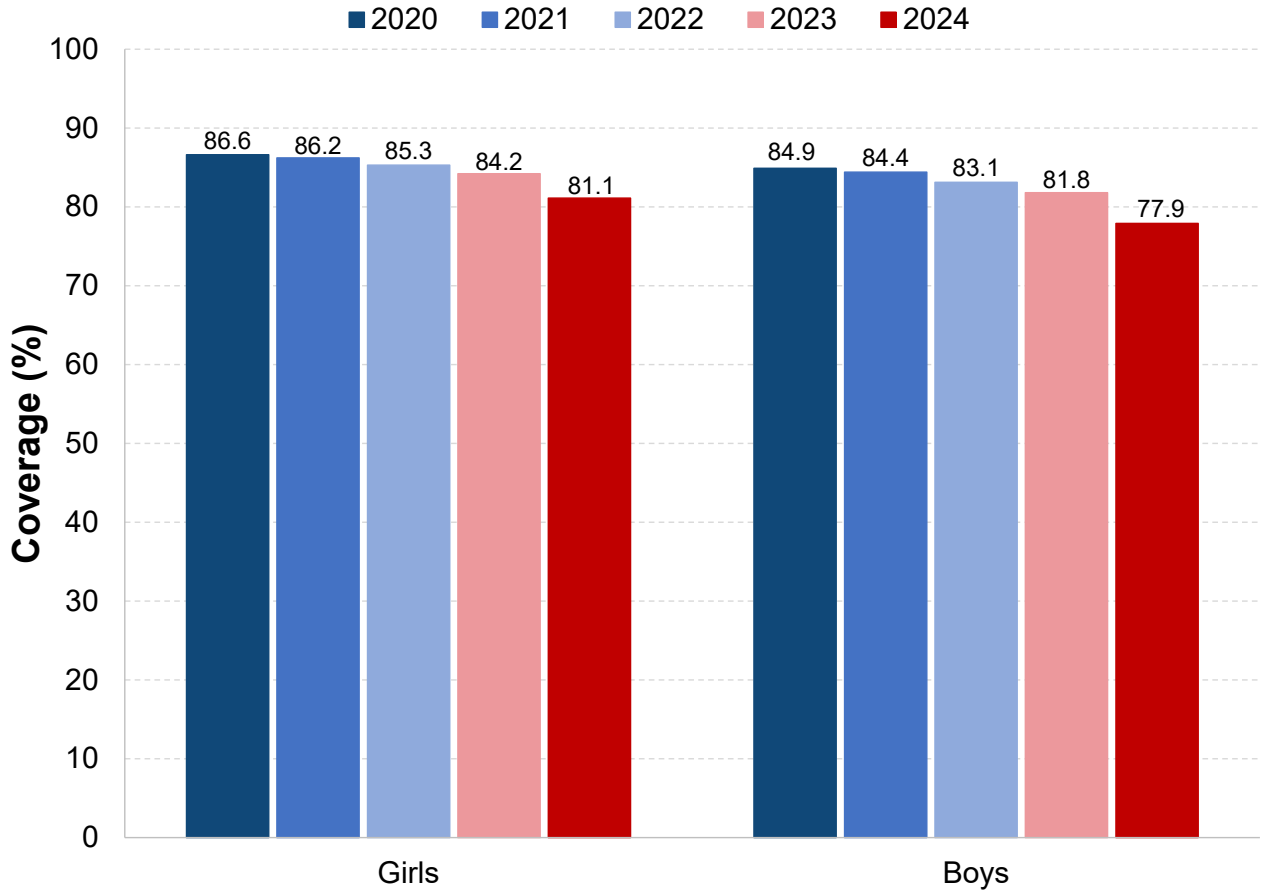
Figure 13. Coverage* of at least one dose of HPV vaccine in adolescents turning 15 years of age in the relevant year,† by gender, Australia, 2020– 2024



* Coverage calculated using the number of Medicare-registered adolescents in each year-wide birth cohort with an AIR record of having received at least one dose of HPV vaccine after their 9th birthday (since HPV is registered to be given from 9 years of age) but before their fifteenth birthday as the numerator and the total number of Medicare-registered adolescents in the relevant birth cohort as the denominator, expressed as a percentage

† Cohorts born:
2005 for 2020 coverage estimates (i.e. vaccines due at age 12–13 years from early 2017 to late 2018)
2006 for 2021 coverage estimates (i.e. vaccines due at age 12–13 years from early 2018 to late 2019)
2007 for 2022 coverage estimates (i.e. vaccines due at age 12–13 years from early 2019 to late 2020)
2008 for 2023 coverage estimates (i.e. vaccines due at age 12–13 years from early 2020 to late 2021)
2009 for 2024 coverage estimates (i.e. vaccines due at age 12–13 years from early 2021 to late 2022)

Source: Australian Immunisation Register data as at 31 March 2021 (for 2020 data), 3 April 2022 (for 2021 data), 2 April 2023 (for 2022 data), 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

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Table 3. Coverage* of at least one dose of HPV vaccine in adolescents turning 15 years of age in the relevant year,† by gender, jurisdiction, and remoteness‡ / socio-economic status¥ of area of residence, Australia, 2023 and 2024

		Girls		Boys	
		2023	2024	2023	2024
Jurisdiction	Australian Capital Territory	90.5	87.0	87.9	87.2
	New South Wales	86.1	82.5	82.7	78.1
	Victoria	85.2	82.5	83.4	80.1
	Queensland	81.7	78.2	79.0	75.5
	South Australia	83.1	79.6	80.5	75.4
	Western Australia	82.4	80.4	82.0	78.9
	Tasmania	83.5	80.3	80.7	76.3
	Northern Territory	78.3	76.4	72.5	67.0
Remoteness category‡	Major cities	84.3	81.4	82.0	78.5
	Inner and outer regional	84.4	80.7	81.4	76.9
	Remote and very remote	80.3	76.4	77.2	71.6
SEIFA quintile¥	First (most disadvantaged)	81.3	76.9	77.5	71.9
	Second	84.0	80.0	80.9	76.4
	Third	83.9	81.0	81.3	77.9
	Fourth	84.5	82.0	82.7	79.2
	Fifth (most advantaged)	86.6	84.3	85.2	82.6
Overall	**Australia**	**84.2**	**81.1**	**81.8**	**77.9**

* Coverage calculated using the number of Medicare-registered adolescents in each year-wide birth cohort with an AIR record of having received at least one dose of HPV vaccine after their 9th birthday (since HPV is registered to be given from 9 years of age) but before their fifteenth birthday as the numerator and the total number of Medicare-registered adolescents in the relevant birth cohort as the denominator, expressed as a percentage

† Cohort born 2008 for 2023 coverage estimates (i.e. vaccines due at age 12–13 years from early 2020 to late 2021) and cohort born 2009 for 2024 coverage estimates (i.e. vaccines due at age 12–13 years from early 2021 to late 2022)

‡ Accessibility/Remoteness Index of Australia (ARIA+)

¥ Socio-Economic Indexes for Areas – Index of Economic Resources

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

HPV vaccination coverage – cohorts turning 13–25 years

Assessing a broader range of year-wide birth cohorts and including vaccine doses received by the end of 2024 (i.e. rather than before the relevant birthday), 71.8% of girls and 67.8% of boys turning 13 years of age in 2024 had received at least one dose of HPV vaccine by 31 December 2024 (Figure 14). Coverage increased with age for both girls and boys – 77.2% and 73.8% of those

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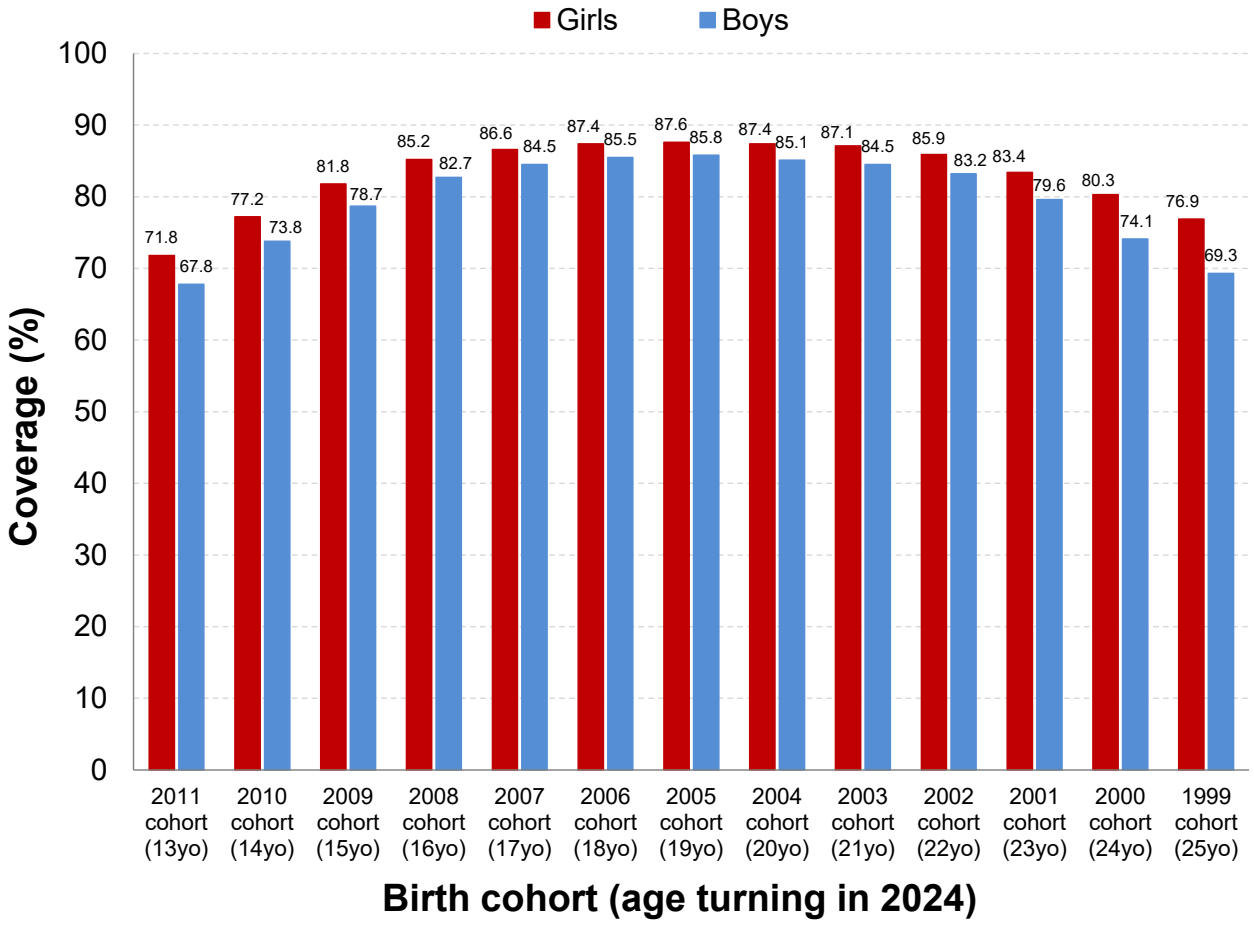
turning 14 years of age, respectively, and 81.8% and 78.7% of those turning 15 years of age, respectively, had received at least one dose, with marginal increases seen in each successive age cohort up to those turning 19 years (Figure 14). Coverage in the cohorts of young adults turning 20 years of age and older decreased with increasing age, down to 76.9% for females and 69.3% for males turning 25 years (Figure 14). The disparity in coverage between females and males decreased with increasing age in older cohorts up to the cohort turning 19 years (1.8 percentage points higher in females), but increased with age in older cohorts, to 7.6 percentage points higher in females than males turning 25 years in 2024 (Figure 14). Note that males became eligible under the NIP for HPV vaccine in 2013. Coverage of at least one dose of HPV vaccine in adolescents/young adults by birth cohort (based on age turning in 2024), gender and jurisdiction is provided in Table A5 in the Appendix.

Figure 14. Coverage of at least one dose of HPV vaccine* in adolescents/young adults by birth cohort/age and gender, Australia, 2024



* Coverage calculated using the number of Medicare-registered adolescents/young adults in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine after their 9th birthday (since HPV is registered to be given from 9 years of age) and given by 31 December 2024 as the numerator and the total number of Medicare-registered adolescents/young adults in the relevant cohort as the denominator, expressed as a percentage

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Source: Australian Immunisation Register data as at 2 February 2025

Diphtheria-tetanus-pertussis vaccination coverage – cohorts turning 13–19 years

Assessing a broad range of year-wide birth cohorts, 73.8% of girls and 70.5% of boys turning 13 years of age in 2024 had received an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December 2024 (Figure 15). Coverage increased with age for both girls and boys – 79.1% and 76.3%, respectively, of those turning 14 years and 83.4% and 80.9% of those turning 15 years had received a dose, with marginal increases seen in each successive age cohort up to those turning 18 years (Figure 15). The disparity in coverage between females and males decreased with increasing age up to those turning 18 years, with coverage 3.3 percentage points higher in girls than boys turning 13 years in 2024 and 1.4 percentage points higher in girls than boys turning 18 years (Figure 15). Coverage of an adolescent dose of diphtheria-tetanus-pertussis vaccine by birth cohort (based on age turning in 2024), gender and jurisdiction is provided in Table A6 in the Appendix.

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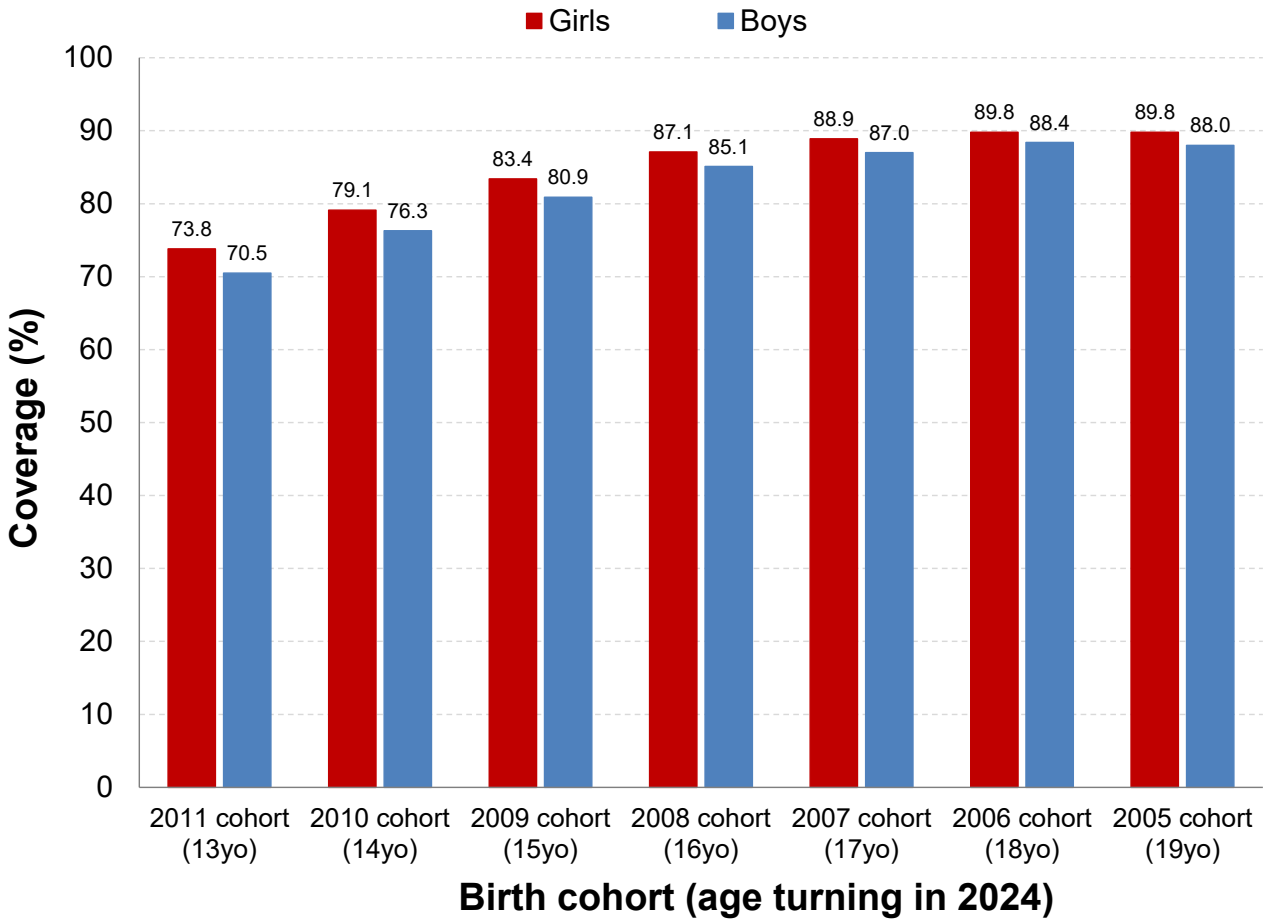
Figure 15. Coverage of an adolescent dose of diphtheria-tetanus-pertussis vaccine* by birth cohort/age and gender, Australia, 2024



* Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥ 10 years of age) dose of a diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) by 31 December 2024 as the numerator and the total number of Medicare-registered adolescents in the relevant cohort as the denominator, expressed as a percentage
dTpa = diphtheria–tetanus–pertussis – formulation for individuals aged ≥10 years; DTPa = diphtheria–tetanus–pertussis – paediatric formulation

Source: Australian Immunisation Register data as at 2 February 2025

Meningococcal ACWY vaccination coverage – cohorts turning 15–19 years

Assessing a broad range of year-wide birth cohorts, 68.5% of girls and 64.4% of boys turning 16 years of age in 2024 had received an adolescent dose of meningococcal ACWY vaccine by 31 December 2024 (Figure 16). Coverage increased with age for both girls and boys, reaching 79.7% and 75.7%, respectively, for those turning 19 years of age (Figure 16). The disparity in coverage between females and males was fairly stable at approximately 4 percentage points in each age cohort assessed (Figure 16). Coverage of an adolescent dose of meningococcal ACWY vaccine by

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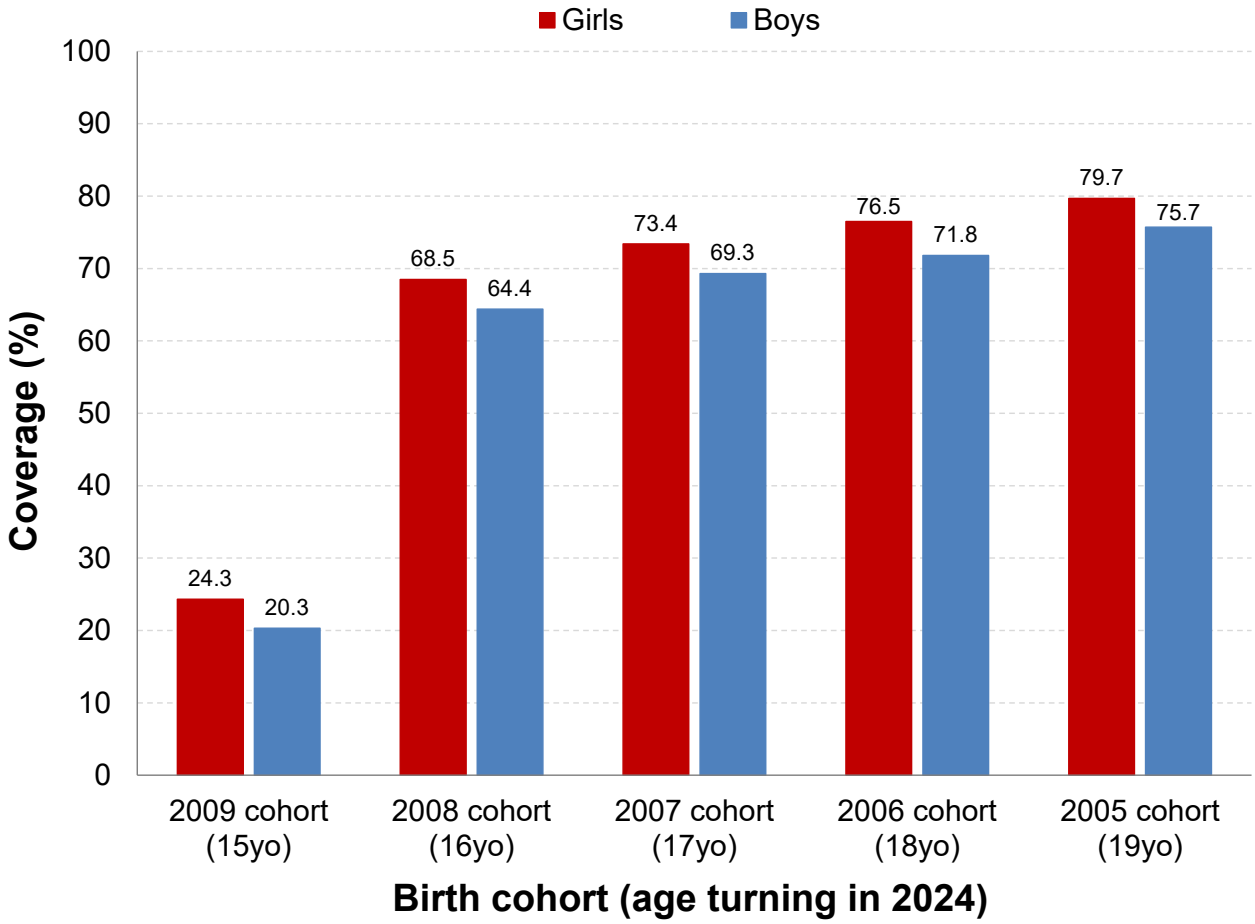
birth cohort (based on age turning in 2024), gender and jurisdiction is provided in Table A7 in the Appendix.

Figure 16. Coverage of an adolescent dose of meningococcal ACWY vaccine* by birth cohort/age and gender, Australia, 2024



* Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥10 years of age) dose of a meningococcal ACWY vaccine given by 31 December 2024 as the numerator and the total number of Medicare-registered adolescents in the relevant cohort as the denominator, expressed as a percentage

Source: Australian Immunisation Register data as at 2 February 2025

Adolescent composite measures of vaccination coverage

HPV + diphtheria-tetanus-pertussis

Using a composite measure – receipt of both an HPV vaccine dose and an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December 2024 – coverage was 79.1% for adolescents turning 15 years of age in 2024, down from 82.6% in 2023 and 83.7% in 2022 (Figure 17). Decreases in coverage between 2023 and 2024 were seen in all jurisdictions, ranging from 2.6

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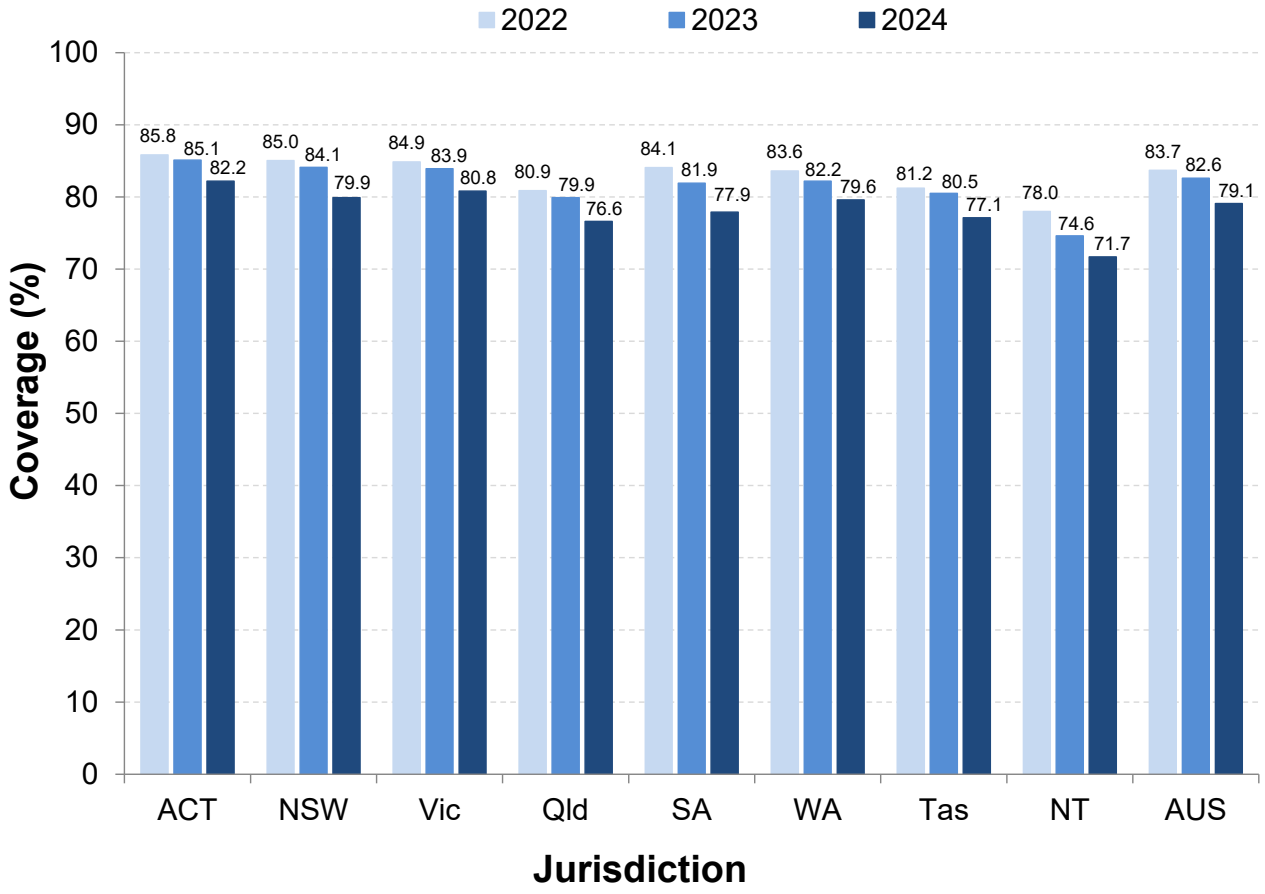
percentage points in Western Australia to 4.2 percentage points in New South Wales. Coverage of this composite measure in 2024 ranged from 71.7% in the Northern Territory to 82.2% in the Australian Capital Territory, with coverage remaining above 80% in only the Australian Capital Territory and Victoria (Figure 17).

Figure 17. Vaccination coverage using composite measure (dose of HPV and adolescent dose of diphtheria-tetanus-pertussis vaccine)* in adolescents turning 15 years,† by jurisdiction, 2022–2024



* * Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine ≥9 years of age and an adolescent (i.e. ≥10 years of age) dose of diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) by 31 December of the relevant year as the numerator and the total number of Medicare-registered adolescents in the relevant cohort as the denominator, expressed as a percentage

† Cohorts born:
2007 for 2022 coverage estimates
2008 for 2023 coverage estimates
2009 for 2024 coverage estimates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 April 2023 (for 2022 data), 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

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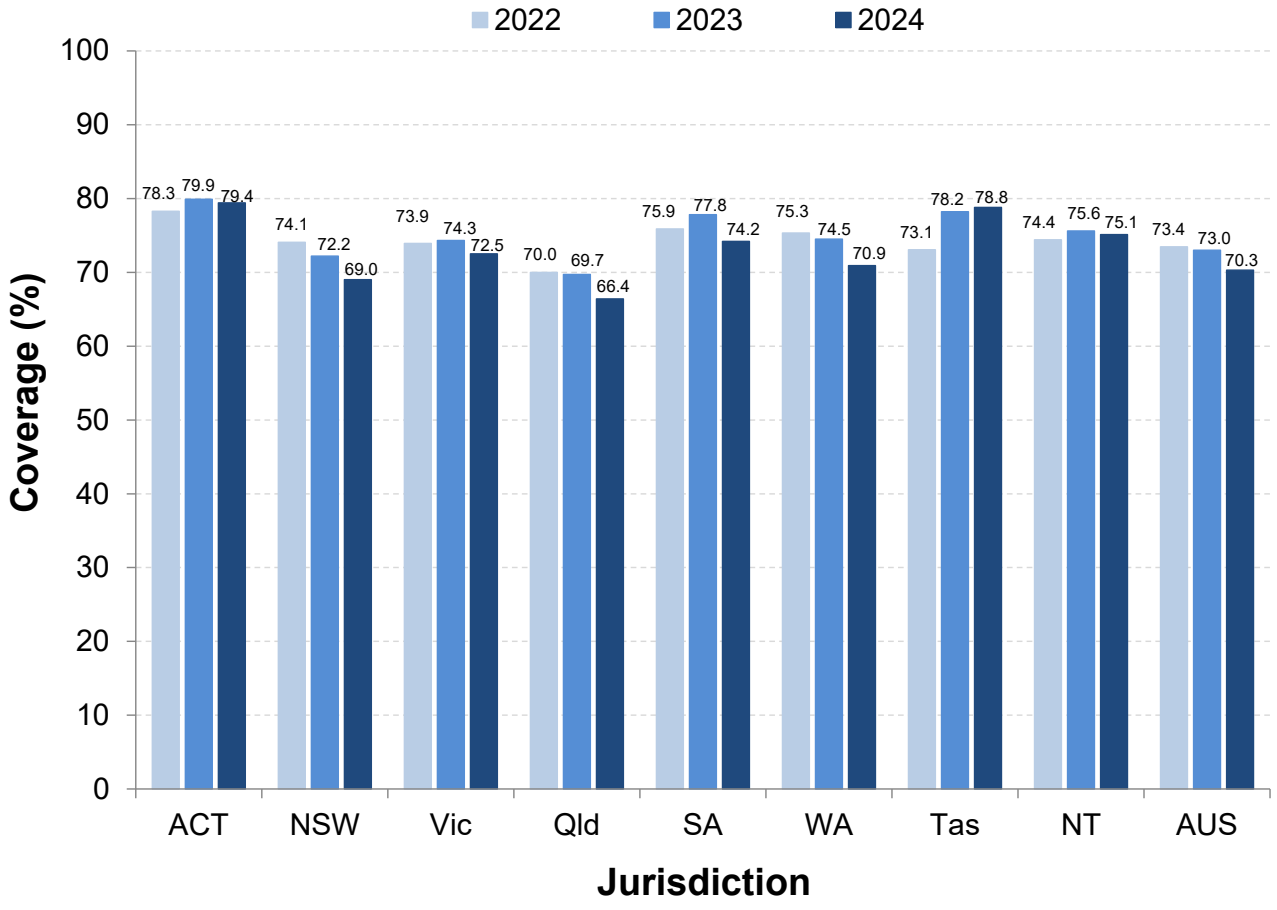
HPV + diphtheria-tetanus-pertussis + meningococcal ACWY vaccine

Using another composite measure – receipt of an HPV vaccine dose and adolescent doses of both diphtheria-tetanus-pertussis and meningococcal ACWY vaccine by 31 December 2024 – coverage was 70.3% for adolescents turning 18 years of age in 2024, down from 73.0% in 2023 and 73.4% in 2022 (Figure 18). Decreases in coverage between 2023 and 2024 were seen in all jurisdictions, except Tasmania (where it increased by 0.6 of a percentage point). The decreases ranged from 0.5 of a percentage point lower in the Australian Capital Territory and Northern Territory to 3.6 percentage points lower in South Australia and Western Australia. Coverage in 2024 by jurisdiction ranged from 66.4% in Queensland to 79.4% in the Australian Capital Territory (Figure 18).

Figure 18. Vaccination coverage using composite measure (dose of HPV and adolescent doses of diphtheria-tetanus-pertussis and meningococcal ACWY vaccine)* in all adolescents turning 18 years,† by jurisdiction, 2022–2024



* Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine (≥9 years of age) and an adolescent (i.e. ≥10 years of age) dose of both diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) and meningococcal ACWY vaccine by 31 December of the relevant year as the numerator and the total number of Medicare-registered adolescents in the relevant cohort as the denominator, expressed as a percentage

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† Cohorts born:
2004 for 2022 coverage estimates
2005 for 2023 coverage estimates
2006 for 2024 coverage estimates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 April 2023 (for 2022 data), 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

Influenza vaccination coverage

Influenza vaccination coverage in adolescents aged 10 to <20 years decreased by 1.9 percentage points between 2023 and 2024, to 13.3% (Figure 5), with decreases seen in all jurisdictions, ranging from 0.7 of a percentage point lower in Queensland to 5.1 percentage points lower in Western Australia (Table A11 in the Appendix).

Aboriginal and Torres Strait Islander adolescents

Human papillomavirus vaccination coverage – cohorts turning 15 years

Coverage of at least one dose of human papillomavirus (HPV) vaccine by the adolescent's fifteenth birthday has decreased each year since 2020 in Aboriginal and Torres Strait Islander girls and boys, with coverage in 2024 being 11.1 and 13.8 percentage points lower than in 2020 at 76.7% and 69.2%, respectively (Figure 19). The largest decrease in coverage was between 2023 and 2024, down by 4.2 percentage points from 80.9% in girls and by 5.8 percentage points from 75.0% in boys (Figure 19). Coverage continues to be greater in Aboriginal and Torres Strait Islander girls than boys, with the disparity in coverage increasing from 4.8 percentage points in 2020 to 7.5 percentage points in 2024 (Figure 19).

Coverage decreased between 2023 and 2024 for Aboriginal and Torres Strait Islander girls and boys in all jurisdictions, except in South Australia, where coverage in girls increased by 0.3 of a percentage point, and in the Northern Territory, where coverage remained stable at 72.7%. In 2024, coverage for Aboriginal and Torres Strait Islander girls and boys ranged from 66.7% and 55.7%, respectively, in South Australia, to 83.8% and 81.0%, respectively, in the Australian Capital Territory (Table 4). Coverage was above 80% in two jurisdictions for Aboriginal and Torres Strait Islander girls (New South Wales and the Australian Capital Territory).It was above 80% for Aboriginal and Torres Strait Islander boys only in the Australian Capital Territory (Table 4).

Coverage of at least one dose of HPV vaccine by the fifteenth birthday in 2024 was lower in Aboriginal and Torres Strait Islander adolescents who resided in remote and very remote areas

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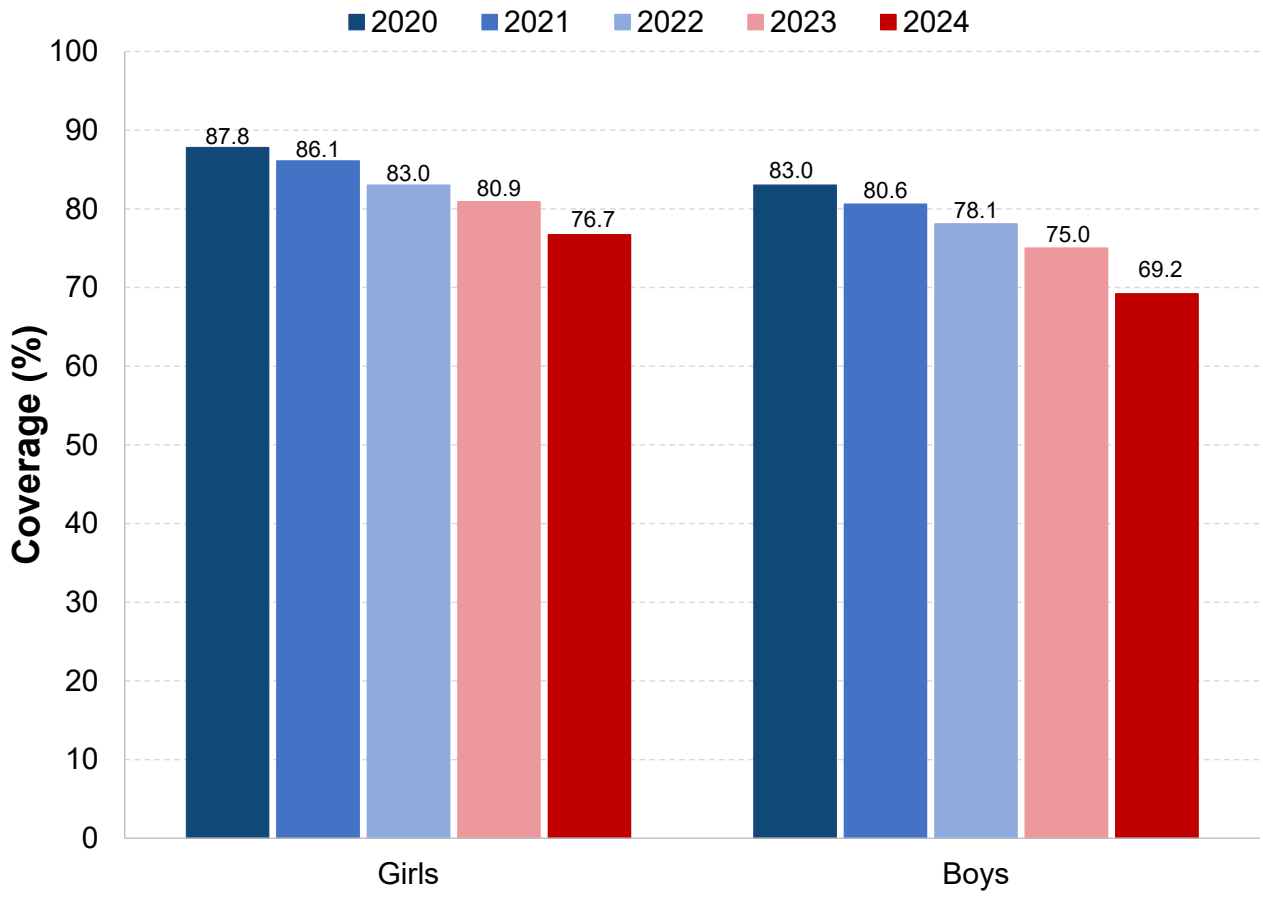
compared to major cities, with the disparity greater for boys than girls (9.5 percentage points for boys compared to 7.6 points for girls). It was also greater than in 2023 (0.8 percentage points more for boys and 1.6 percentage points more for girls) (Table 4).

In Aboriginal and Torres Strait Islander girls, coverage of at least one dose of HPV vaccine by the fifteenth birthday in 2024 was 12.0 percentage points higher in those living in the most socioeconomically advantaged (fifth quintile) areas than in those living in the most disadvantaged (first quintile) areas (84.9% versus 72.9%) (Table 4). In Aboriginal and Torres Strait Islander boys, coverage of at least one dose of HPV vaccine by the fifteenth birthday in 2024 was 15.6 percentage points higher in those living in the most socioeconomically advantaged areas than in those living in the most disadvantaged areas (79.8% versus 64.2%) (Table 4).

Figure 19. Coverage* of at least one dose of HPV vaccine in Aboriginal and Torres Strait Islander adolescents turning 15 years of age in the relevant year,† by gender, Australia, 2020–2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide birth cohort with an AIR record of having received at least one dose of HPV vaccine after their 9th birthday (since HPV is registered to

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be given from 9 years of age) but before their fifteenth birthday as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant birth cohort as the denominator, expressed as a percentage

† Cohorts born:
2005 for 2020 coverage estimates (i.e. vaccines due at age 12–13 years from early 2017 to late 2018)
2006 for 2021 coverage estimates (i.e. vaccines due at age 12–13 years from early 2018 to late 2019)
2007 for 2022 coverage estimates (i.e. vaccines due at age 12–13 years from early 2019 to late 2020)
2008 for 2023 coverage estimates (i.e. vaccines due at age 12–13 years from early 2020 to late 2021)
2009 for 2024 coverage estimates (i.e. vaccines due at age 12–13 years from early 2021 to late 2022)

Source: Australian Immunisation Register data as at 31 March 2021 (for 2020 data), 3 April 2022 (for 2021 data), 2 April 2023 (for 2022 data), 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

Table 4. Coverage* of at least one dose of HPV vaccine in Aboriginal and Torres Strait Islander adolescents turning 15 years of age in the relevant year,† by gender, jurisdiction, and remoteness‡ / socio-economic status¥ of area of residence, Australia, 2023 and 2024

		Girls		Boys	
		2023	2024	2023	2024
Jurisdiction	Australian Capital Territory	91.7	83.8	75.3	81.0
	New South Wales	86.9	81.5	80.2	72.3
	Victoria	80.4	78.7	75.9	74.3
	Queensland	79.5	74.6	74.2	67.8
	South Australia	66.4	66.7	59.2	55.7
	Western Australia	78.5	74.8	73.4	71.9
	Tasmania	81.2	77.5	82.2	72.8
	Northern Territory	72.7	72.7	65.6	59.9
Remoteness category‡	Major cities	82.7	79.6	77.5	74.0
	Inner and outer regional	81.0	75.7	74.8	67.0
	Remote and very remote	75.9	72.0	69.6	64.5
SEIFA quintile¥	First (most disadvantaged)	76.8	72.9	70.9	64.2
	Second	82.1	75.4	74.6	67.3
	Third	81.9	78.9	77.0	74.1
	Fourth	84.1	81.8	80.0	75.4
	Fifth (most advantaged)	88.9	84.9	84.5	79.8
Overall	**Australia**	**80.9**	**76.7**	**75.0**	**69.2**

* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide birth cohort with an AIR record of having received at least one dose of HPV vaccine after their 9th birthday (since HPV is registered to be given from 9 years of age) but before their fifteenth birthday as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant birth cohort as the denominator, expressed as a percentage
† Cohort born 2008 for 2023 coverage estimates (i.e. vaccines due from early 2020 to late 2021) and cohort born 2009 for 2024 coverage estimates (i.e. vaccines due from early 2021 to late 2022)
‡ Accessibility/Remoteness Index of Australia ($ARIA^{++}$)

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¥ Socio-Economic Indexes for Areas – Index of Economic Resources

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

HPV vaccination coverage – cohorts turning 13–25 years

Assessing a broader range of year-wide birth cohorts and including vaccine doses received by the end of 2024 (i.e. rather than before the relevant birthday), 60.5% of Aboriginal and Torres Strait Islander girls and 53.7% of boys turning 13 years of age in 2024 had received at least one dose of HPV vaccine by 31 December 2024 (Figure 20). Coverage increased with age for both girls and boys – 68.7% and 62.7% of those turning 14 years, respectively, and 78.4% and 71.1% of those turning 15 years, with marginal increases seen in each successive age cohort up to those turning 21 years for girls and 20 years for boys (Figure 20). Coverage in the cohorts of young adults turning 20 years and older decreased with increasing age, down to 81.5% for Aboriginal and Torres Strait Islander females turning 25 years and 63.7% for males (Figure 20). The disparity in coverage between Aboriginal and Torres Strait Islander females and males decreased with increasing age up to the cohort turning 19 years but increased with age in older cohorts, with coverage 17.8 percentage points higher in females than males turning 25 years in 2024 (Figure 20). Coverage of at least one dose of HPV vaccine in all Aboriginal and Torres Strait Islander adolescents by birth cohort (based on age turning in 2024), gender and jurisdiction is provided in Table A8 in the Appendix.

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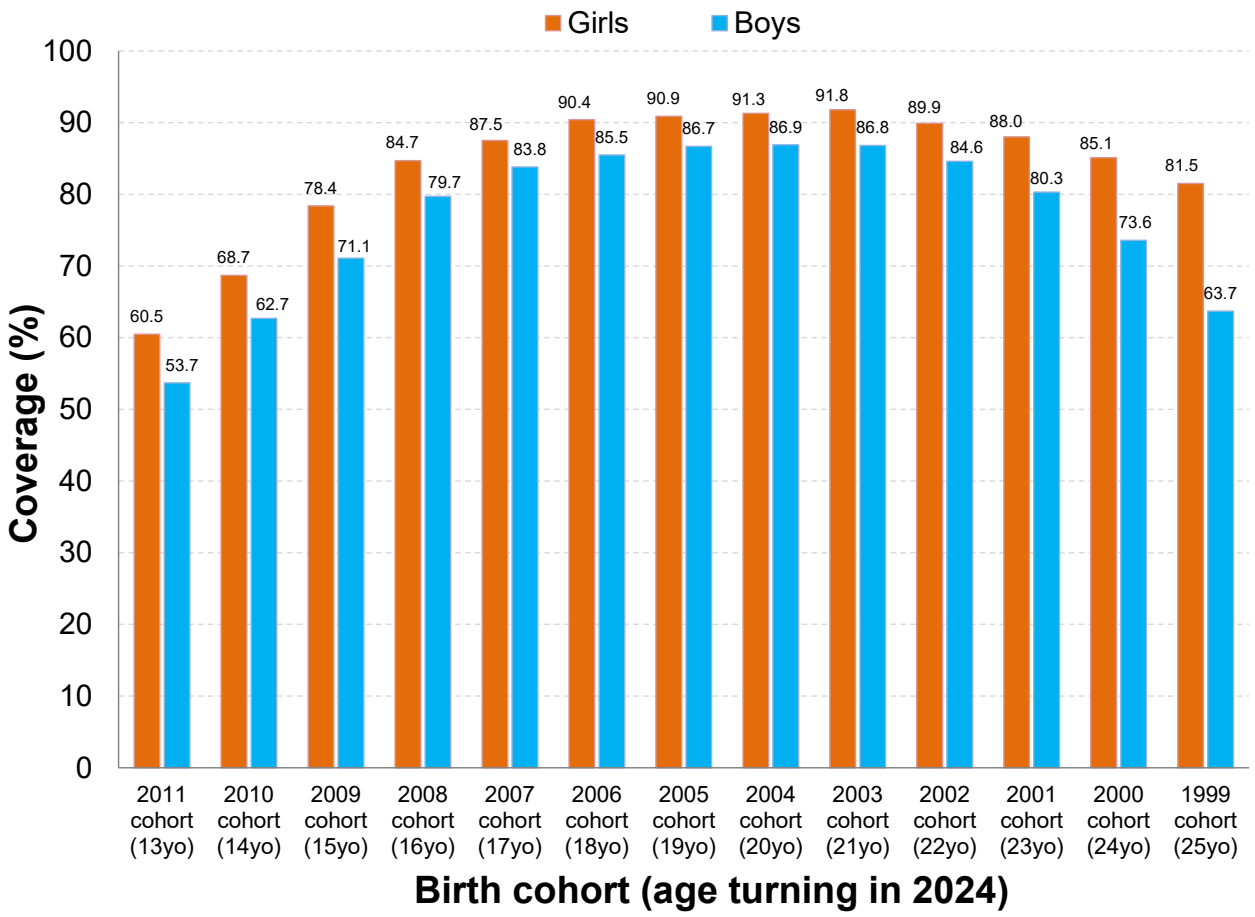
Figure 20. Coverage of at least one dose of HPV vaccine* in Aboriginal and Torres Strait Islander adolescents/young adults by birth cohort/age and gender, Australia, 2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents/young adults in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine after their 9th birthday (since HPV is registered to be given from 9 years of age) and given by 31 December 2024 as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents/young adults in the relevant cohort as the denominator, expressed as a percentage.

Source: Australian Immunisation Register data as at 2 February 2025

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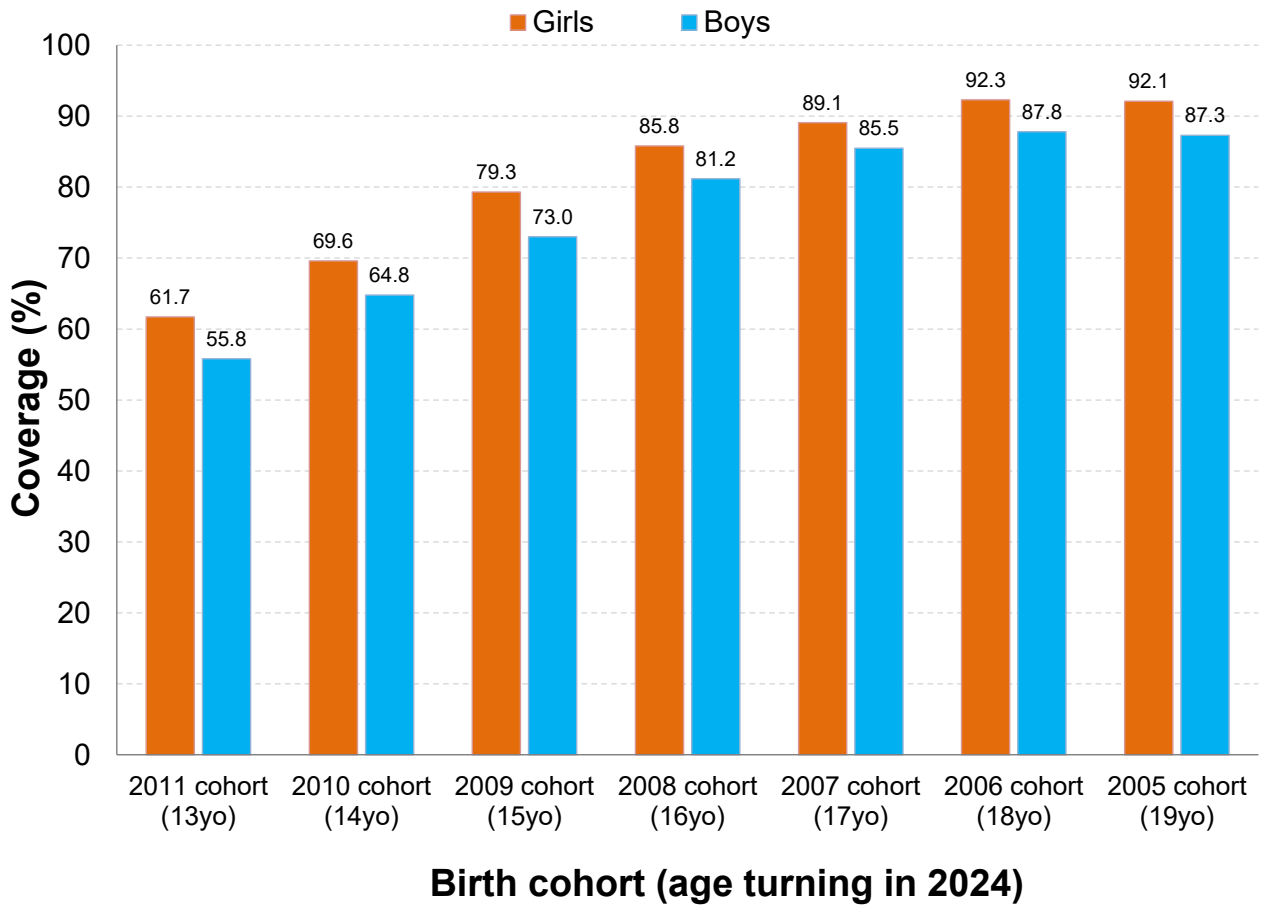
Diphtheria-tetanus-pertussis vaccination coverage – cohorts turning 13–19 years

Assessing a broad range of year-wide birth cohorts, 61.7% of Aboriginal and Torres Strait Islander girls and 55.8% of boys turning 13 years of age in 2024 had received an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December 2024 (Figure 21). Coverage increased with age for both girls and boys – 69.6% and 64.8%, respectively, of Aboriginal and Torres Strait Islander girls and boys turning 14 years and 79.3% and 73.0% of those turning 15 years had received a dose, with increases seen in each successive age cohort up to those turning 18 years (Figure 21). Coverage was higher for Aboriginal and Torres Strait Islander girls than boys in each age cohort (Figure 21). Coverage of an adolescent dose of diphtheria-tetanus-pertussis vaccine in Aboriginal and Torres Strait Islander adolescents by birth cohort (based on age turning in 2024), gender and jurisdiction is provided in Table A9 in the Appendix.

Figure 21. Coverage of an adolescent dose of diphtheria-tetanus-pertussis vaccine* in Aboriginal and Torres Strait Islander adolescents by birth cohort/age and gender, Australia, 2024



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* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥ 10 years of age) dose of a diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) by 31 December 2024 as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant cohort as the denominator, expressed as a percentage
dTpa = diphtheria–tetanus–pertussis – formulation for individuals aged ≥10 years; DTPa = diphtheria–tetanus–pertussis – paediatric formulation

Source: Australian Immunisation Register data as at 2 February 2025

Meningococcal ACWY vaccination coverage – cohorts turning 15–19 years

Assessing a broad range of year-wide birth cohorts, 52.7% of Aboriginal and Torres Strait Islander girls and 47.1% of boys turning 16 years of age in 2024 had received an adolescent dose of meningococcal ACWY vaccine by 31 December 2024. (Figure 22). Coverage increased with age for both Aboriginal and Torres Strait Islander girls and boys, reaching 72.9% and 66.7%, respectively, for those turning 19 years (Figure 22). Coverage was higher for Aboriginal and Torres Strait Islander girls than boys in each age cohort (Figure 22). Coverage of an adolescent dose of meningococcal ACWY vaccine in Aboriginal and Torres Strait Islander adolescents by birth cohort (based on age turning in 2024), gender and jurisdiction is provided in Table A7 in the Appendix.

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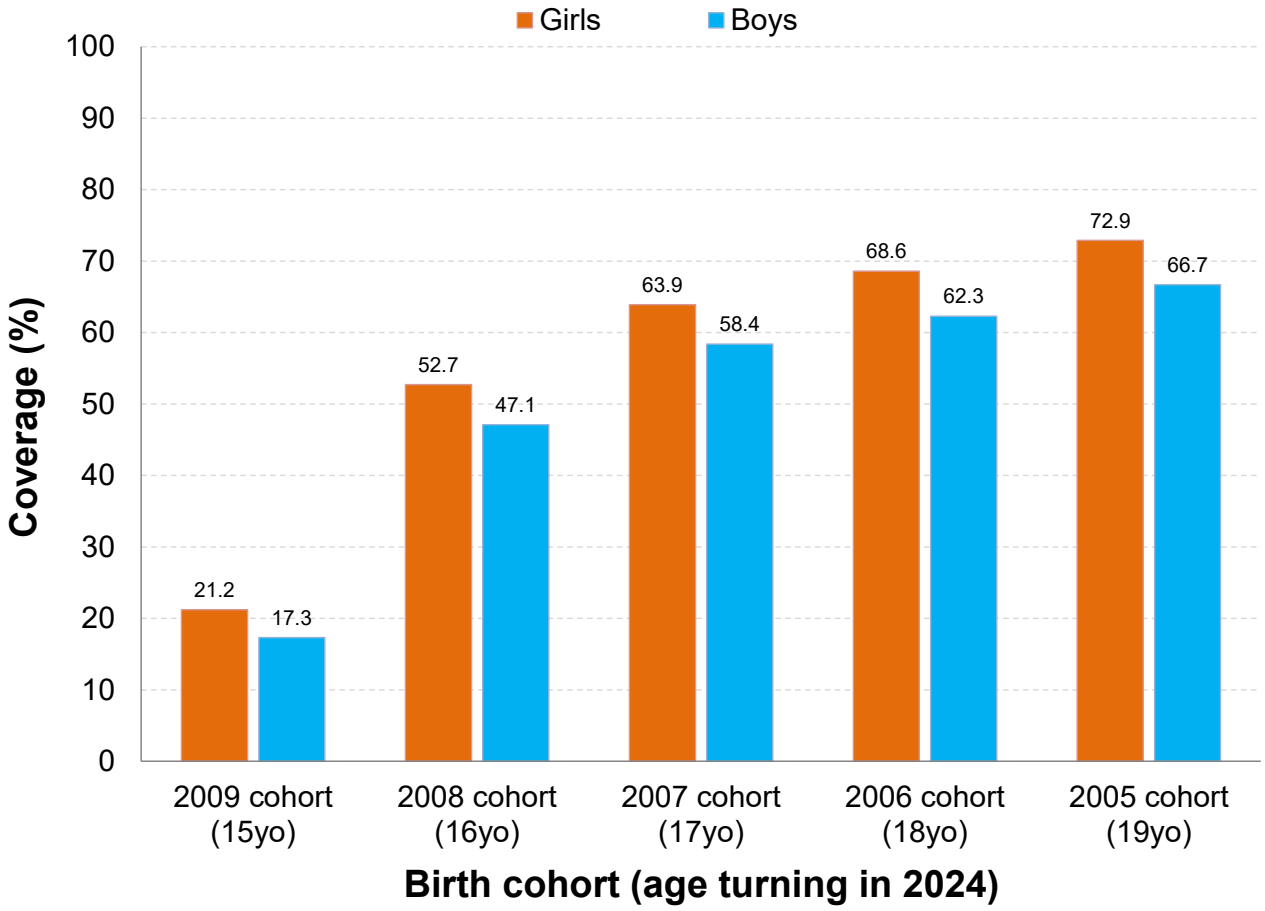
Figure 22. Coverage of an adolescent dose of meningococcal ACWY vaccine* in Aboriginal and Torres Strait Islander adolescents by birth cohort/age and gender, Australia, 2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥10 years of age) dose of a meningococcal ACWY vaccine given by 31 December 2024 as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant cohort as the denominator, expressed as a percentage

Source: Australian Immunisation Register data as at 2 February 2025

Aboriginal and Torres Strait Islander adolescent composite measures of vaccination coverage

HPV + diphtheria-tetanus-pertussis

Using a composite measure – receipt of both an HPV vaccine dose and an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December 2024 – coverage was 73.4% for Aboriginal and Torres Strait Islander adolescents turning 15 years of age in 2024, down from 77.9% in 2023 and 80.1% in 2022 (Figure 23). Decreases in coverage between 2023 and 2024 were seen in all jurisdictions, ranging from 0.7 of a percentage point in Victoria to 6.6 percentage points in

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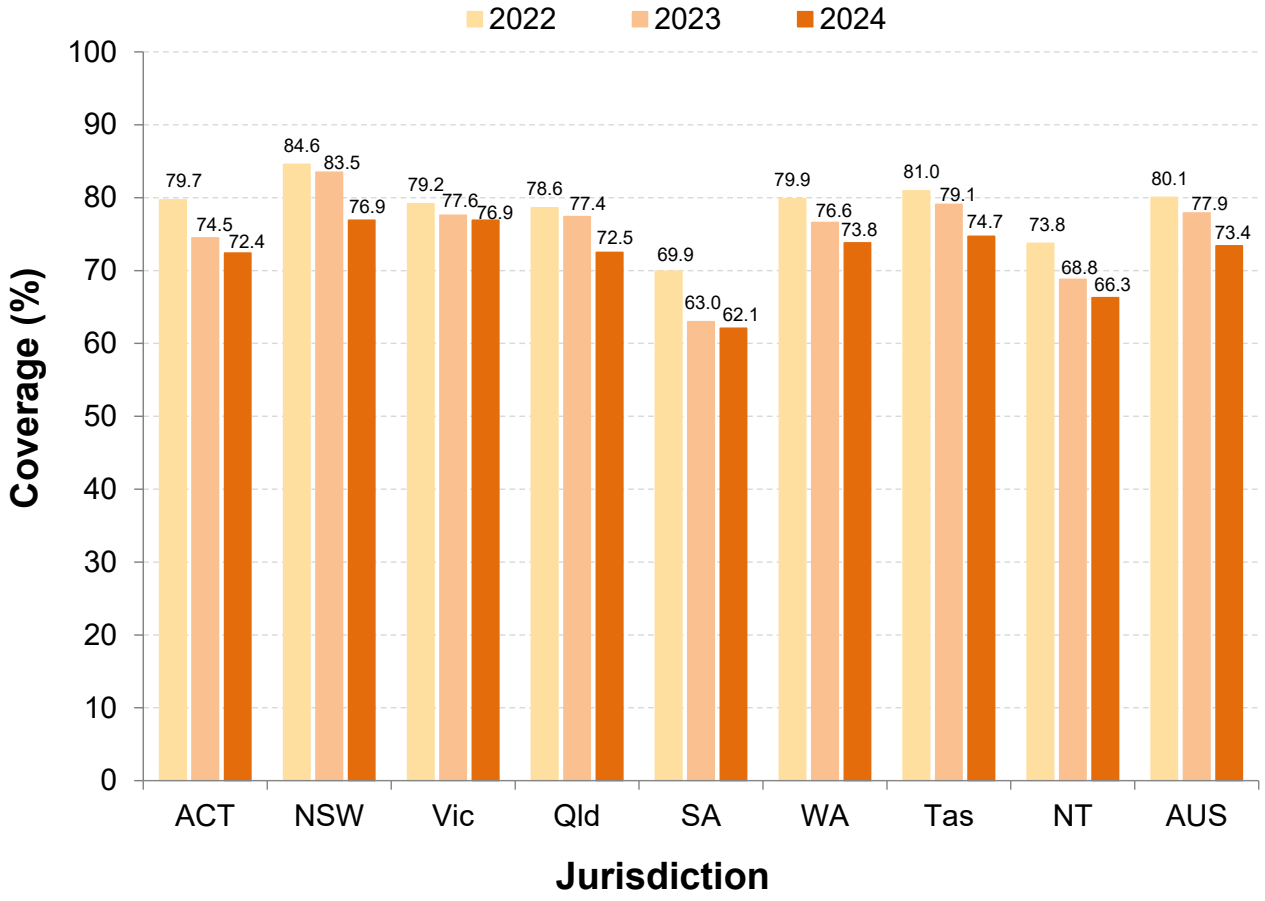
New South Wales. Coverage of this composite measure in 2024 ranged from 62.1% in South Australia to 76.9% in New South Wales and Victoria (Figure 23).

Figure 23. Vaccination coverage using composite measure (dose of HPV and adolescent dose of diphtheria-tetanus-pertussis vaccine)* in Aboriginal and Torres Strait Islander adolescents turning 15 years,† by jurisdiction, 2022–2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine ≥9 years of age and an adolescent (i.e. ≥10 years of age) dose of diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) by 31 December of the relevant year as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant cohort as the denominator, expressed as a percentage

† Cohorts born: 2007 for 2022 coverage estimates; 2008 for 2023 coverage estimates; 2009 for 2024 coverage estimates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 April 2023 (for 2022 data), 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

HPV + diphtheria-tetanus-pertussis + meningococcal ACWY vaccine

Using another composite measure – receipt of an HPV vaccine dose and adolescent doses of both diphtheria-tetanus-pertussis and meningococcal ACWY vaccine by 31 December 2024 – coverage

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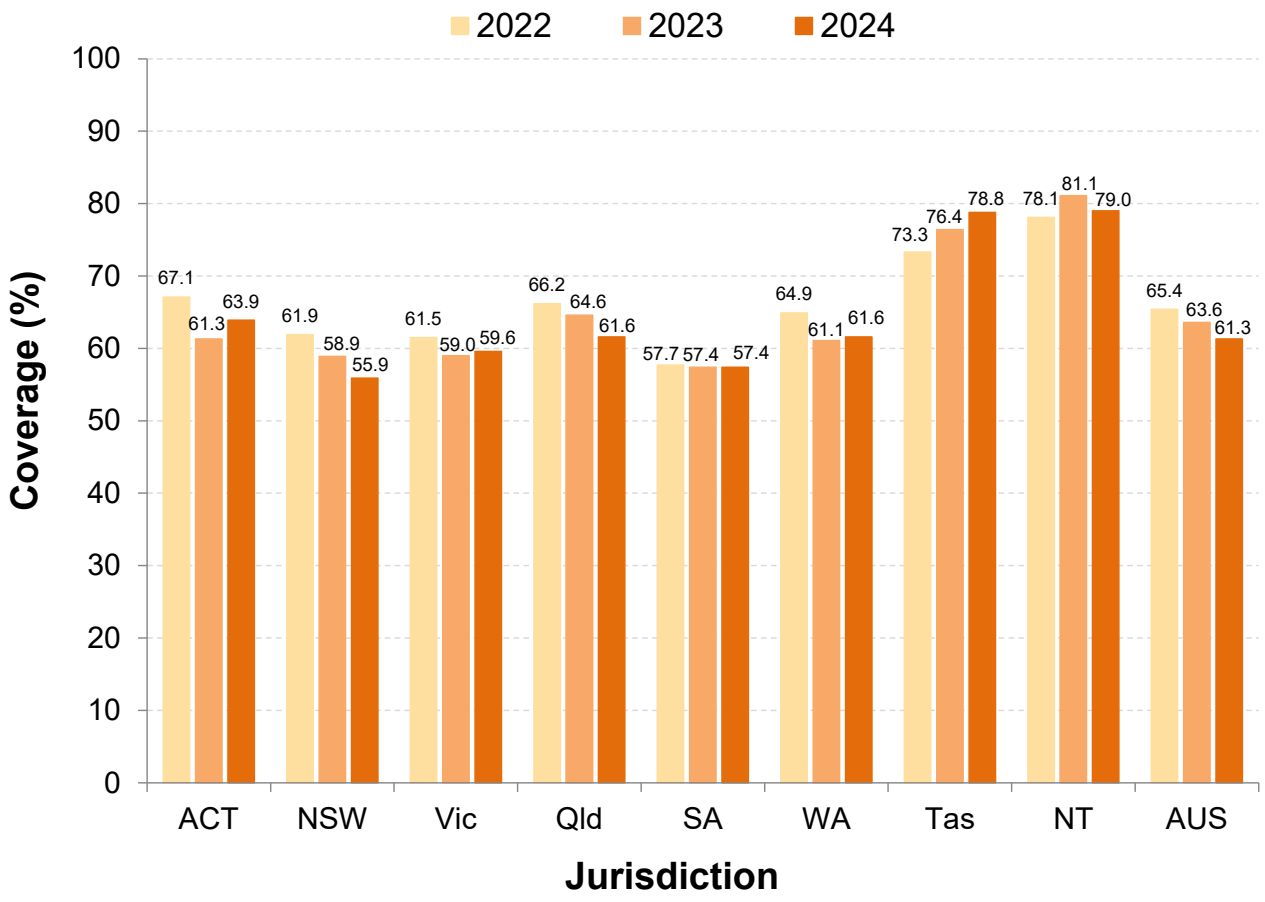
was 61.3% for Aboriginal and Torres Strait Islander adolescents turning 18 years of age in 2024, down from 63.6% in 2023 and 65.4% in 2022 (Figure 24). Coverage in 2024 by jurisdiction ranged from 55.9% in New South Wales to 79.0% in the Northern Territory (Figure 24).

Figure 24. Vaccination coverage using composite measure (dose of HPV and adolescent doses of diphtheria-tetanus-pertussis and meningococcal ACWY vaccine)* in Aboriginal and Torres Strait Islander adolescents turning 18 years,† by jurisdiction, 2022–2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine (≥9 years of age) and an adolescent (i.e. ≥10 years of age) dose of both diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) and meningococcal ACWY vaccine by 31 December of the relevant year as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant cohort as the denominator, expressed as a percentage

† Cohorts born: 2004 for 2022 coverage estimates; 2005 for 2023 coverage estimates;2006 for 2024 coverage estimates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 April 2023 (for 2022 data), 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

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Influenza vaccination coverage

Influenza vaccination coverage in Aboriginal and Torres Strait Islander adolescents aged 10 to <20 years in 2024 was 15.8%, 1.8 percentage points lower than in 2023 (Figure 10), with decreases seen in all jurisdictions, ranging from ranging from 0.6 of a percentage point lower in South Australia to 4.7 percentage points lower in Western Australia (Table A12 in the Appendix).

All Adults

Zoster vaccination

Shingrix uptake in NIP-eligible population aged ≥65 years

As at 31 December 2024, 4,569,254 adults aged ≥65 years were estimated to be eligible to receive Shingrix under the NIP following its inclusion in the program on 1 November 2023. Of this eligible population, 34.1% received at least one dose of Shingrix and 25.6% received two or more doses of Shingrix between 1 November 2023 and 31 December 2024 (Figure 25). Uptake of at least one dose of Shingrix in the NIP-eligible population aged ≥65 years by jurisdiction ranged from 16.7% (10.4% for two or more doses) in the Northern Territory to 40.9% (30.0% for two or more doses) in Tasmania (Figure 25).

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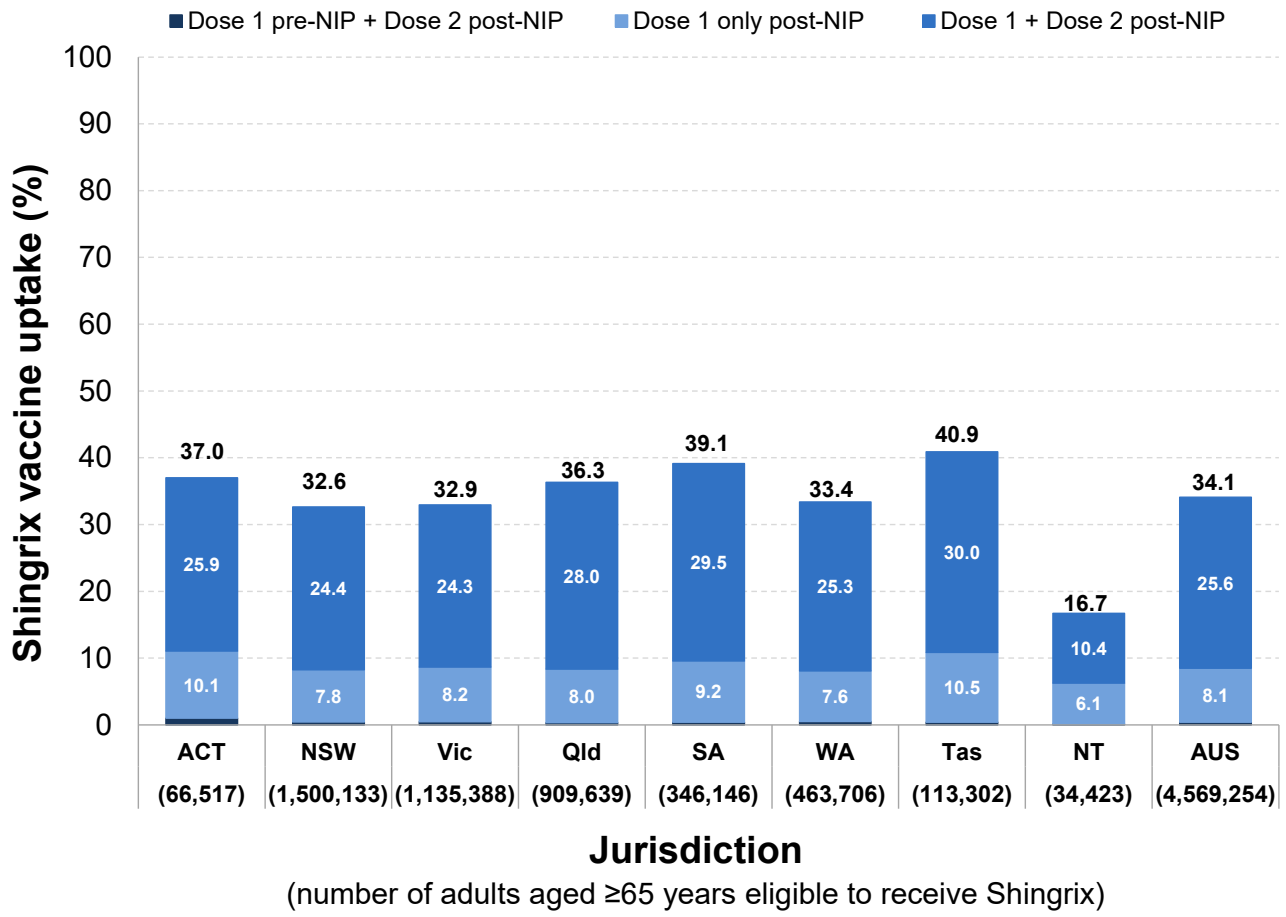
Figure 25. Shingrix vaccine uptake by 31 December 2024* in the NIP-eligible population† aged ≥65 years by jurisdiction, Australia



* Shingrix vaccine uptake was calculated as a proportion i.e. the number of NIP-eligible adults aged ≥65 years who received at least one dose of Shingrix vaccine between 1 November 2023 (i.e. from the date Shingrix was introduced onto the NIP) and 31 December 2024 divided by the number of NIP-eligible adults aged ≥65 years based on age at 31 December 2024. Receipt of at least one dose of Shingrix vaccine was categorised as a) 'Dose 1 pre-NIP + Dose 2 post-NIP' (i.e. receipt of one dose of Shingrix before its inclusion on the NIP and another dose after its inclusion on the NIP with interval of at least 4 weeks between doses); b) 'Dose 1 only post-NIP' (i.e. receipt of only one dose of Shingrix, or two doses less than 4 weeks apart, after its inclusion on the NIP, where Dose 1 not received pre-NIP); and c) 'Dose 1 + Dose 2 post-NIP' (i.e. receipt of two doses of Shingrix, at least 4 weeks apart, after its inclusion on the NIP, where Dose 1 not received pre-NIP).

† All adults aged ≥65 years are eligible for funded Shingrix vaccine on the NIP. However, individuals need to wait 5 years if they have previously received Zostavax through the NIP, or 12 months if they have received Zostavax privately. As the AIR data analysed did not include information on whether previous doses were NIP- or privately funded, adults with a prior dose of Zostavax were defined as eligible for Shingrix if Zostavax was given at age 70–79 years more than 5 years previously as at 31 December 2024 (i.e. Zostavax received on/prior to 31 December 2019), or if Zostavax was given at age <70 years or ≥80 years more than 12 months previously as at 31 December 2024 (i.e. Zostavax received between 1 January 2024 – 31 December 2024). Adults aged ≥65 years with an AIR record of a first dose of Shingrix received prior to it becoming available on the NIP (Shingrix had been available on private prescription since June 2021) were also included in the defined NIP-eligible population. Note: Adults aged ≥65 years who had received two doses of Shingrix, with interval of at least 4 weeks between doses, before 1 November 2023 were excluded from the NIP-eligible population.

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025.

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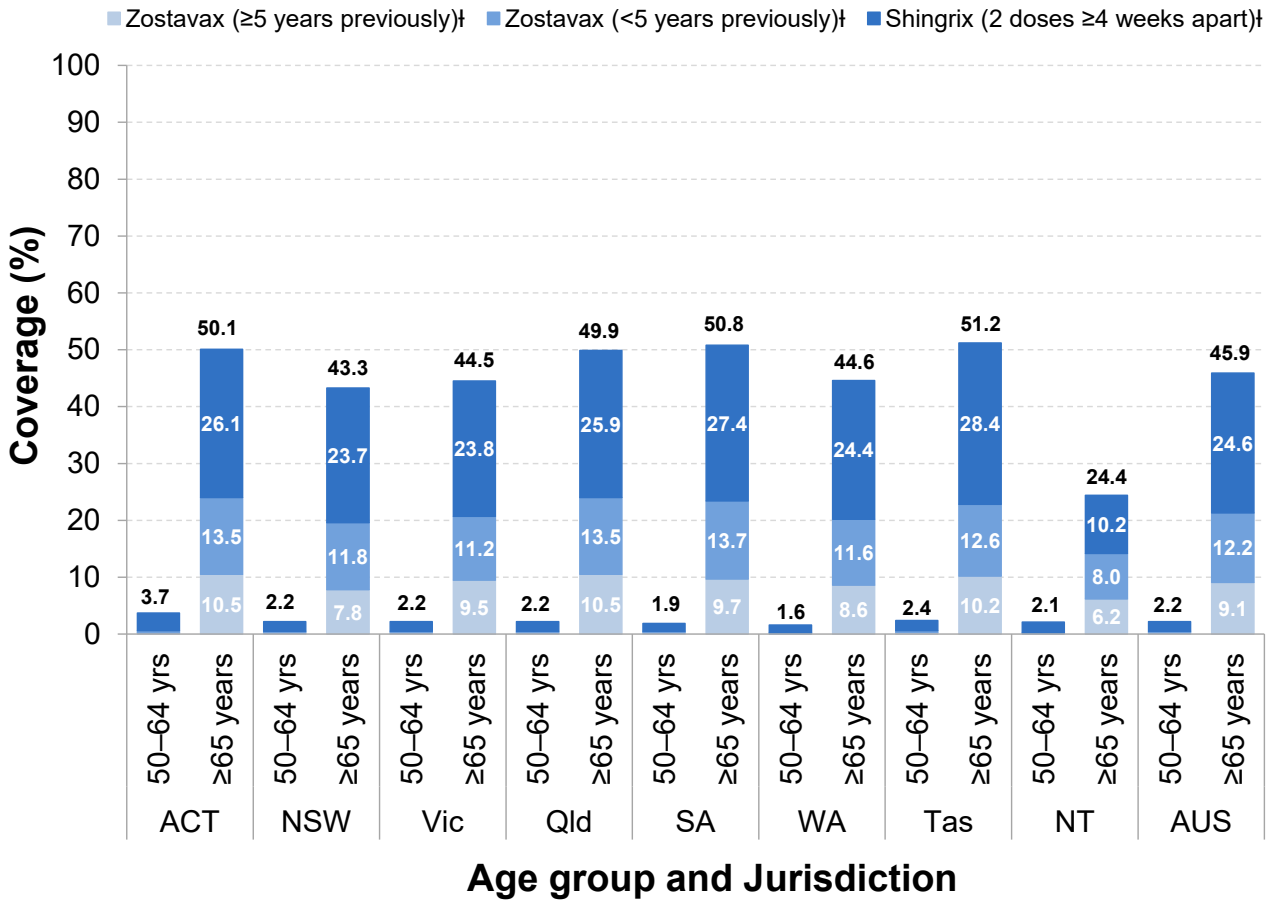
Zoster vaccination coverage in adults aged ≥50 years

Zoster vaccination coverage is defined as ever having received one dose of Zostavax, or two doses of Shingrix given at least 4 weeks apart. For adults aged ≥65 years in 2024, it was 45.9% overall, with coverage by jurisdiction ranging from 24.4% in the Northern Territory to 51.2% in Tasmania (Figure 26). In contrast, zoster vaccination coverage for adults aged 50–64 years in 2024 was below 4% in all jurisdictions (Figure 26). In all jurisdictions except the Northern Territory, more than 23% of adults aged ≥65 years had received two doses of Shingrix at least 4 weeks apart. By jurisdiction, an additional 8.0–13.7% of adults aged ≥65 years had not received two doses of Shingrix at least 4 weeks apart but had received a dose of Zostavax less than five years previously and an additional 6.2–10.5% had not received two doses of Shingrix at least 4 weeks apart but had received a dose of Zostavax five or more years previously (Figure 26). An additional 5.2% of adults aged ≥65 years had no record of Zostavax and only one dose of Shingrix, ranging from 4.6% in the Northern Territory to 6.6% in Tasmania (data not shown).

Figure 26. Zoster vaccination coverage* in adults aged ≥50 years, by vaccine brand, age group and jurisdiction, Australia, 2024.



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* Coverage calculated using the number of Medicare-registered adults in each age group with AIR records of either receipt of 1 dose of Zostavax or 2 doses of Shingrix (if given at least 4 weeks apart) by 31 December 2024 as the numerator and the total number of Medicare-registered adults in the relevant age group as the denominator, expressed as a percentage.

ǂThe proportion of overall zoster vaccination coverage by vaccine brand was calculated and categorised as a) receipt of at least two doses of Shingrix given at least 4 weeks apart, irrespective of whether Zostavax had been received previously; b) receipt of at least one dose of Zostavax less than 5 years previously (i.e. received between 1 January 2020 – 31 December 2024), where two doses of Shingrix at least 4 weeks apart had not been received and c) receipt of at least one dose of Zostavax 5 or more years previously (i.e. received on/prior to 31 December 2019), where two doses of Shingrix at least 4 weeks apart had not been received.

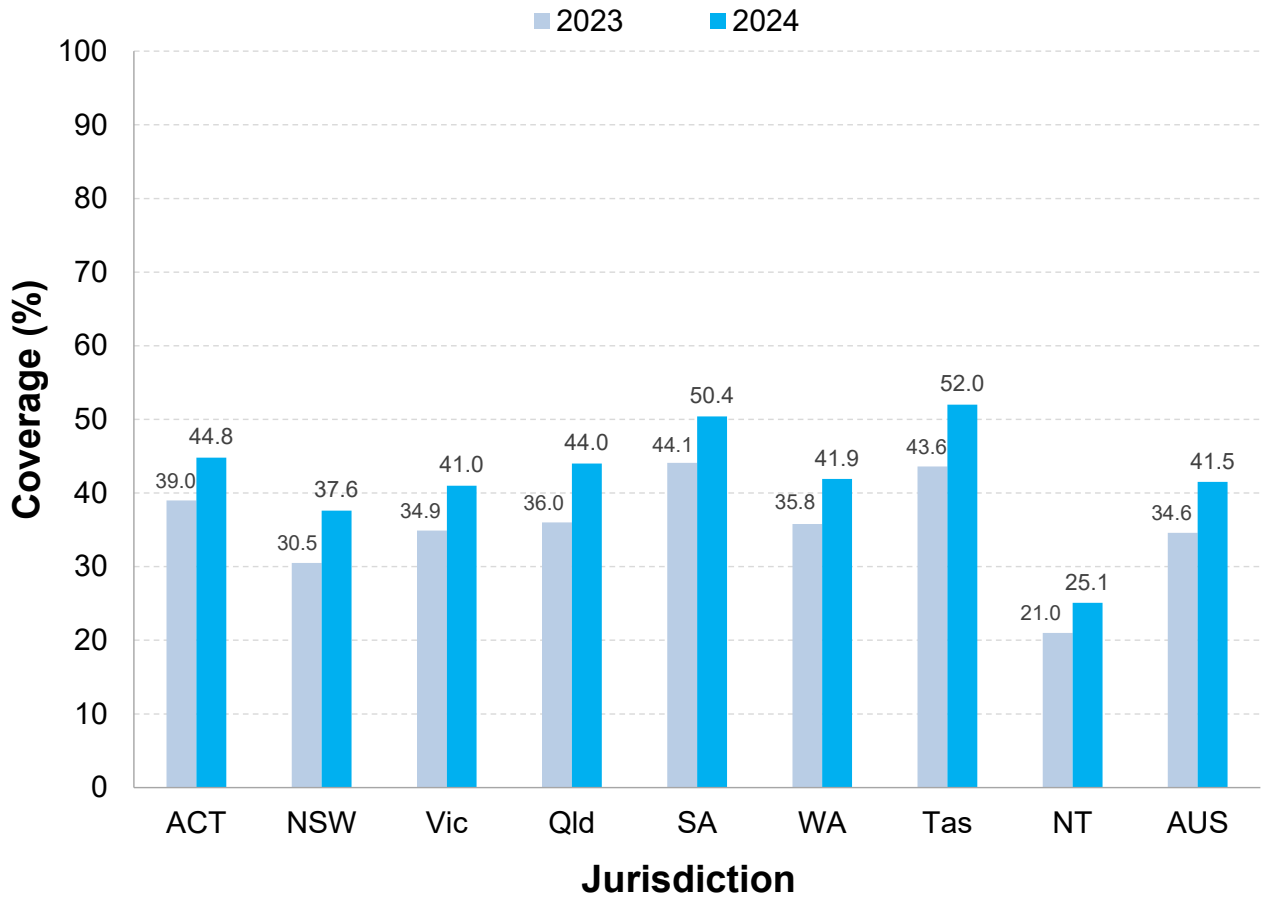
ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025.

Pneumococcal vaccination coverage

Vaccination coverage of an adult dose of 13vPCV for adults aged ≥70 years in 2024 was 41.5% overall, up from 34.6% in 2023, with coverage in 2024 ranging from 25.1% in the Northern Territory to 52.0% in Tasmania – and being higher in all jurisdictions than in 2023 (Figure 27).

Figure 27. Coverage of an adult dose of 13vPCV* for adults aged ≥70 years, 2023 and 2024, by jurisdiction, Australia, 2024



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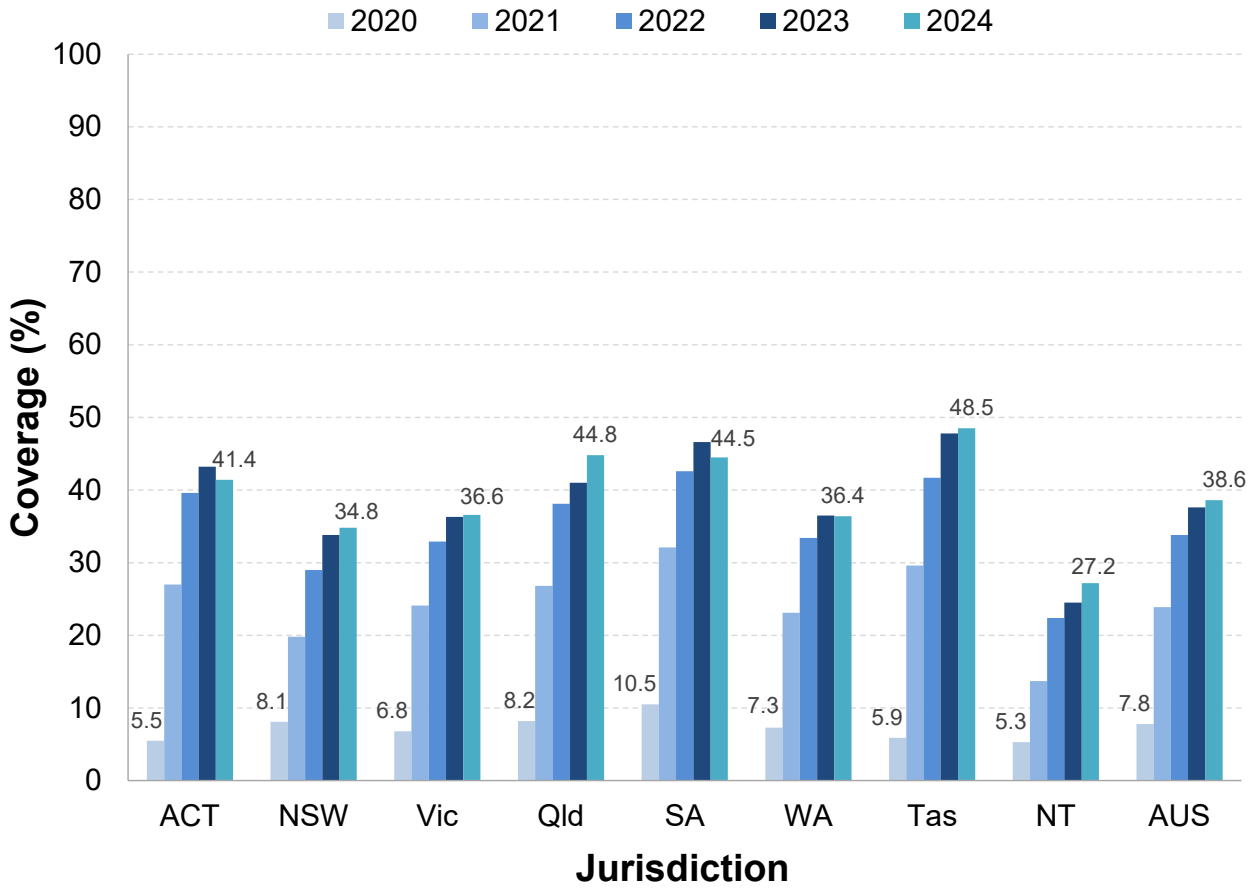
* Coverage calculated using the number of Medicare-registered adults in each age group with an AIR record of having received an adult dose of 13vPCV by 31 December 2024 as the numerator and the total number of Medicare-registered adults in each age group as the denominator, expressed as a percentage

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025.

Coverage of an adult dose of 13vPCV in adults turning 71 years in 2024 was 38.6% overall, up from 37.6% in 2023, with coverage ranging from 27.2% in the Northern Territory to 48.5% in Tasmania (Figure 28).

Figure 28. Coverage of an adult dose of 13vPCV* in adults turning 71 years of age† in the year of interest, by jurisdiction, Australia, 2020–2024



* Coverage calculated using the number of Medicare-registered adults in each year-wide cohort with an AIR record of having received an adult dose of 13vPCV by 31 December of the relevant year as the numerator and the total number of Medicare-registered adults in the relevant cohort as the denominator, expressed as a percentage

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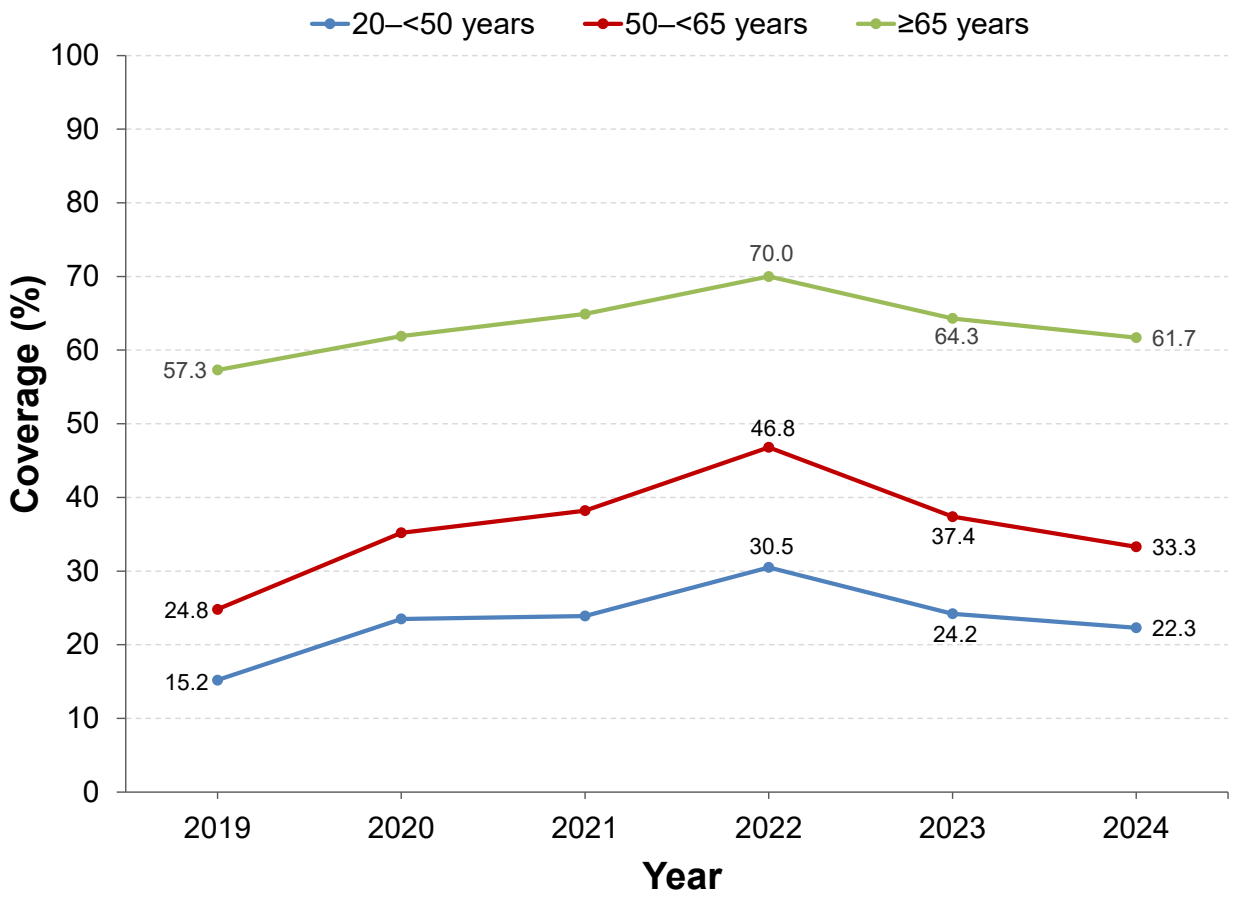
Note: The 2020 and 2021 data points differ to what was presented in the 2021 report due to vaccinations given after 71 years of age in the relevant year now being included in the coverage calculations.
† Cohorts born 1 January–31 December 1949 for 2020 coverage; 1 January–31 December 1950 for 2021 coverage; 1 January–31 December 1951 for 2022 coverage; 1 January–31 December 1952 for 2023 coverage; and 1 January–31 December 1953 for 2024 coverage
ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 3 April 2022 (for 2020 and 2021 coverage), 2 April 2023 (for 2022 coverage), 4 February 2024 (for 2023 coverage) and 2 February 2025 (for 2024 coverage).

Influenza vaccination coverage

In 2024, influenza vaccination coverage in adults decreased across all three adult age groups – to 22.3% in the 20 to <50 years age group, 33.3% in the 50 to <65 years age group and 61.7% in the ≥65 years age group (Figure 5 and Figure 29). Coverage was lower in 2024 than in 2023 across all adult age groups and jurisdictions (Table A11 in the Appendix).

Figure 29. Coverage of seasonal influenza vaccine* by adult age group,† Australia, 2019–2024



* Receipt of at least one dose of any influenza vaccine in the calendar year of interest

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† Categorised into age groups based on age at vaccination

Source: Australian Immunisation Register data as at 31 March 2020 (for 2019 data), 31 March 2021 (for 2020 data), 3 April 2022 (for 2021 data), 2 April 2023 (for 2022 data), 4 February 2024 (for 2023 data) and 2 February 2025 (for 2024 data)

Influenza vaccination coverage for adults aged ≥65 years in 2023 varied across Australia (Figure 30). Coverage in many remote areas of Western, Central and Far North Australia was substantially lower than in Southeast Australia, with only 11.7% coverage in East Arnhem, 18.3% in the East Pilbara region, 18.6% in Barkly and 20.9% in Katherine. There were also areas of lower than average coverage in most capital cities (Figure 30).

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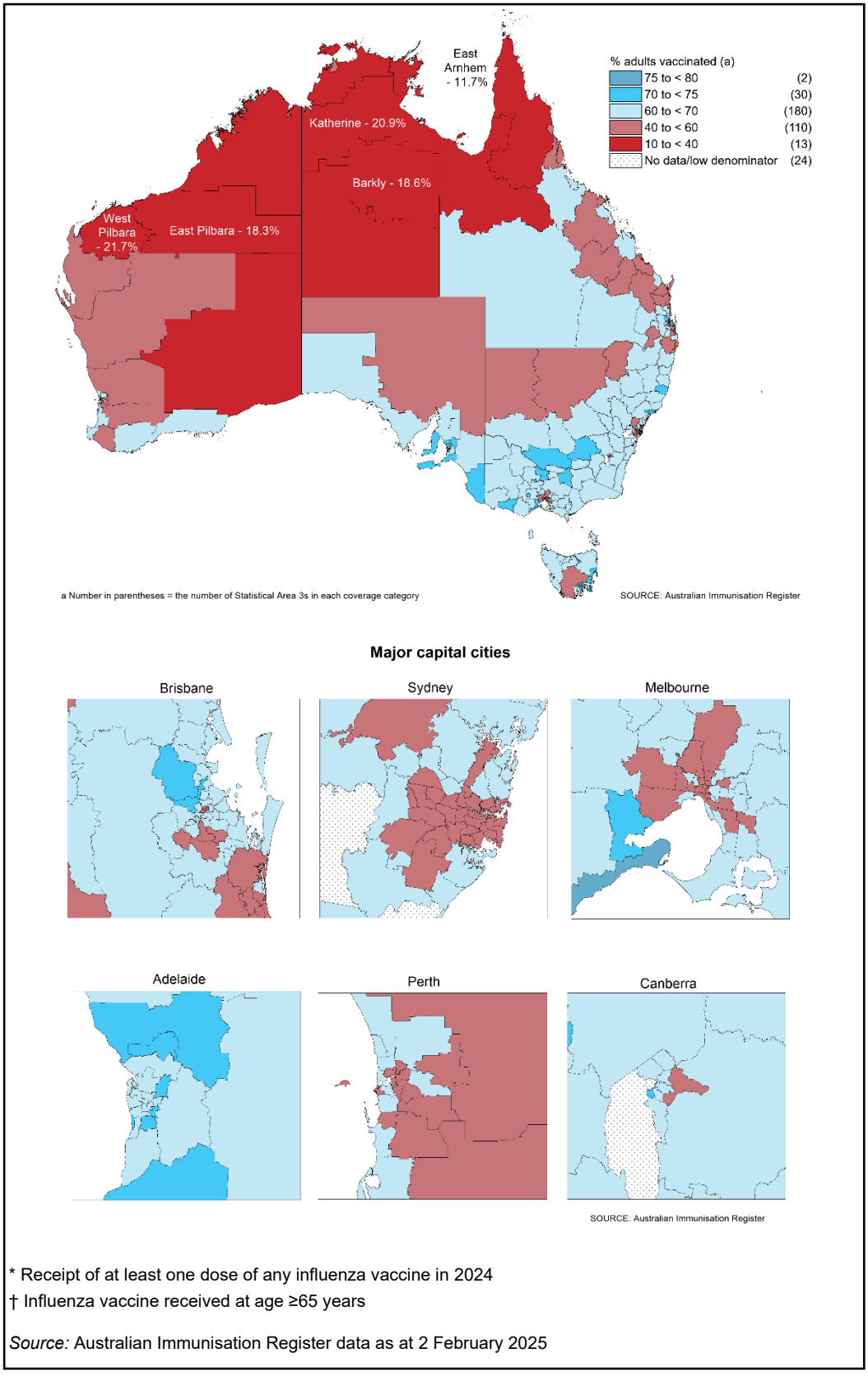
Figure 30. Coverage of seasonal influenza vaccine* in adults aged ≥65 years† by Statistical Area 3, Australia, 2024



* Receipt of at least one dose of any influenza vaccine in 2024

† Influenza vaccine received at age ≥65 years

Source: Australian Immunisation Register data as at 2 February 2025

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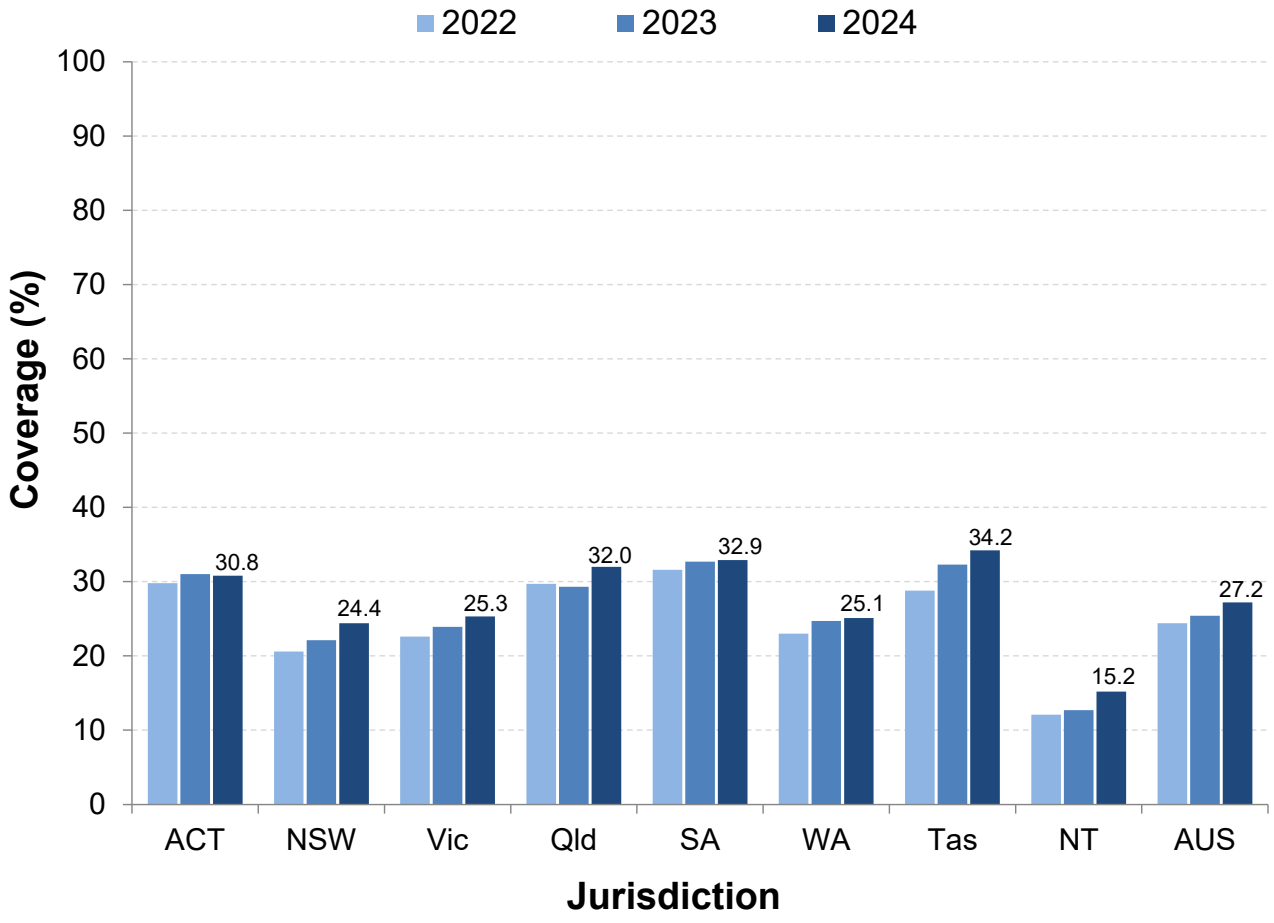
Adult composite measure of vaccination coverage

Using a composite measure – a dose of influenza vaccine in the calendar year of interest, an adult dose of 13vPCV and either 1 dose of Zostavax (if Zostavax was received in the past 5 years) or 2 doses of Shingrix vaccine (given at least 4 weeks apart) – coverage was 27.2% overall in adults turning 71 years in 2024, 1.8 and 2.8 percentage points higher than the corresponding figures for 2023 and 2022, respectively (Figure 31). Coverage using this composite measure by jurisdiction in 2024 ranged from 15.2% in the Northern Territory to 34.2% in Tasmania (Figure 31).

Figure 31. Vaccination coverage using composite measure* in adults turning 71 years of age in relevant year,† by jurisdiction, Australia, 2022–2024



* Coverage calculated using the number of Medicare-registered adults in each cohort with an AIR record of a dose of influenza vaccine in the calendar year of interest, an adult dose of 13vPCV and either 1 dose of Zostavax (if Zostavax received in the previous 5 years, relevant to the calendar year of interest) or 2 doses of Shingrix vaccine (given at least 4 weeks apart) by the end of the relevant year as the numerator and the total number of Medicare-registered adults in the relevant cohort as the denominator, expressed as a percentage

† Cohorts born 1 January–31 December 1951 for 2022 coverage, 1 January–31 December 1952 for 2023 coverage and 1 January–31 December 1953 for 2024 coverage

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025 (for 2022-2024 coverage).

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Up-to-date diphtheria, tetanus and pertussis vaccination coverage

Nationally, 33.3% of adults aged 50–64 years and 36.2% of adults aged ≥65 years were up-to-date for diphtheria vaccination in 2024, with 33.4% and 36.3% up-to-date for tetanus vaccination in these age groups, respectively (Figure 32). By jurisdiction, up-to-date coverage for diphtheria vaccination ranged from 30.5% in Western Australia to 44.3% in the Northern Territory for adults aged 50–64 years and from 32.5% in Victoria to 43.6% in Queensland for adults aged ≥65 years (Table 5), with similar patterns seen for up-to-date coverage for tetanus vaccination. Up-to-date coverage for diphtheria and tetanus vaccination was higher for adults aged ≥65 years than 50–64 years in all jurisdictions except in the Northern Territory (Table 5). Up-to-date coverage for pertussis vaccination was 9.2 – 11.8 percentage points lower than for diphtheria and tetanus vaccination, at 24.1% for adults aged 50–64 years and 24.5% for adults aged ≥65 years (Figure 32). By jurisdiction, up-to-date coverage for pertussis vaccination ranged from 22.0% in Western Australia for both age groups to 29.1% in Tasmania for adults aged 50–64 years and 30.3% in the Australian Capital Territory for adults aged ≥65 years (Table 5). Up-to-date coverage for pertussis vaccination was higher for adults aged ≥65 years than 50–64 years in all jurisdictions except Queensland, Tasmania and the Northern Territory (Table 5).

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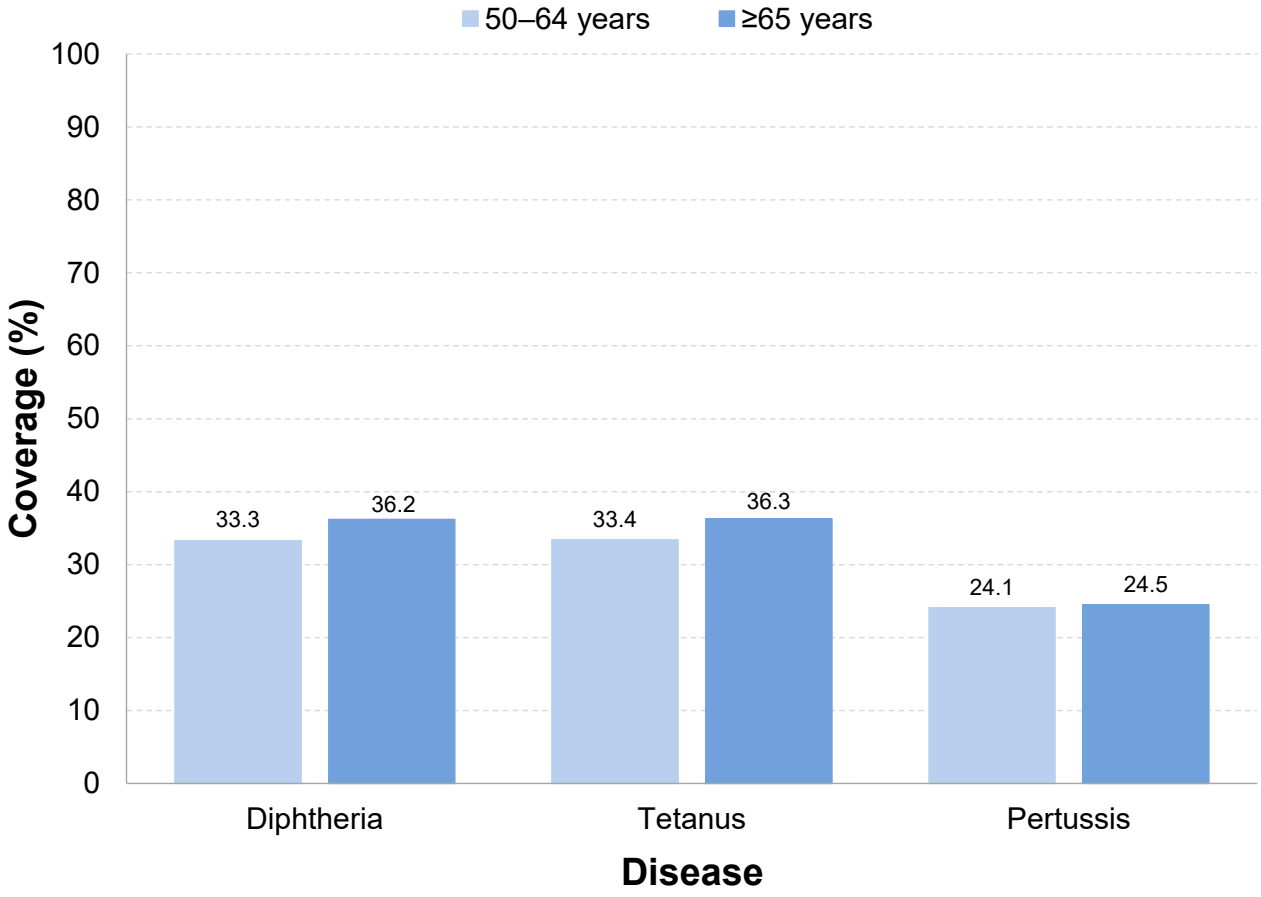
Figure 32. Up-to-date* coverage for diphtheria, tetanus and pertussis vaccination for adults aged ≥50 years by age group,† Australia, 2024



* Up-to-date vaccination coverage for diphtheria, tetanus and pertussis was assessed in line with Australian Immunisation Handbook recommendations: i.e. adults ≥50 years were deemed up to date for tetanus and diphtheria vaccination if they had received a tetanus or diphtheria-containing vaccine after the age of 40 years, and up to date for pertussis vaccination if they had received a pertussis-containing vaccine after the age of 40 years (for those aged 50–64 years) or 55 years (for those aged ≥65 years). Up-to-date vaccination coverage for each antigen was calculated by dividing the number of Medicare-registered adults deemed up-to-date as at 31 December 2024 by the total number of Medicare-registered adults registered in each age group. Note: up-to-date vaccination coverage for these antigens are likely to be under-estimates as the AIR only expanded to include adult vaccinations in 2016, and the reporting of adult tetanus, diphtheria, and pertussis vaccinations is not currently mandatory

† Age groups based on age at 31 December 2024.

Source: Australian Immunisation Register data as at 2 February 2025

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Table 5. Up-to-date* coverage for diphtheria, tetanus and pertussis vaccination for adults aged ≥50 years by age group† and jurisdiction, Australia, 2024

	% up-to-date					
	Diphtheria		Tetanus		Pertussis	
	50–64 years	≥65 years	50–64 years	≥65 years	50–64 years	≥65 years
Australian Capital Territory	33.7	38.7	33.7	38.8	26.5	30.3
New South Wales	31.9	35.0	32.0	35.1	23.1	24.2
Victoria	31.3	32.5	31.4	32.6	22.6	23.1
Queensland	38.5	43.6	38.6	43.8	27.7	27.4
South Australia	32.6	35.8	32.7	35.9	24.0	24.3
Western Australia	30.5	32.8	30.6	32.9	22.0	22.0
Tasmania	38.1	39.4	38.2	39.6	29.1	28.0
Northern Territory	44.3	40.6	44.3	40.7	28.1	23.8

* Up-to-date vaccination coverage for diphtheria, tetanus and pertussis was assessed in line with Australian Immunisation Handbook recommendations: i.e. adults ≥50 years were deemed up to date for tetanus and diphtheria vaccination if they had received a tetanus or diphtheria-containing vaccine after the age of 40 years, and up to date for pertussis vaccination if they had received a pertussis-containing vaccine after the age of 40 years (for those aged 50–64 years) or 55 years (for those aged ≥65 years). Up-to-date vaccination coverage for each antigen was calculated by dividing the number of Medicare-registered adults deemed up-to-date as at 31 December 2024 by the total number of Medicare-registered adults registered in each age group. Note: up-to-date vaccination coverage for these antigens are likely to be under-estimates as the AIR only expanded to include adult vaccinations in 2016, and the reporting of adult tetanus, diphtheria, and pertussis vaccinations is not currently mandatory.
† Age groups based on age at 31 December 2024.

Source: Australian Immunisation Register data as at 2 February 2025

Up-to-date COVID-19 vaccination

Nationally, 84.7% of adults aged 18–64 years had received at least one dose of a COVID-19 vaccine ever by 31 December 2024 (ranging from 79.2% in the Northern Territory to 88.5% in the Australian Capital Territory) (Figure 33), with only 4.9% having received at least one dose in the past 12 months (i.e. during 2024) (data not shown). As at 31 December 2024, 86.5% of adults aged 65–74 years had received at least one dose of a COVID-19 vaccine ever (data not shown), with 25.6% having received at least one dose in the past 12 months (i.e. during 2024), ranging by jurisdiction from 12.5% in the Northern Territory to 40.2% in the Australian Capital Territory (Figure 33). For adults aged ≥75 years, 87.3% had received at least one dose of a COVID-19 vaccine ever by 31 December 2024, 37.0% had received at least one dose in the past 12 months (i.e. during 2024) (data not shown) and 14.4% had received at least one dose in the past 6 months as at 31 December 2024 (i.e. since 1 July 2024), ranging from 6.0% in the Northern Territory to 22.5% in Tasmania (Figure 33). Only 5.7% of adults aged ≥75 years had received two doses during 2024 (i.e. one dose between 1 January – 30 June and a second dose between 1 July – 31 December) (data not shown).

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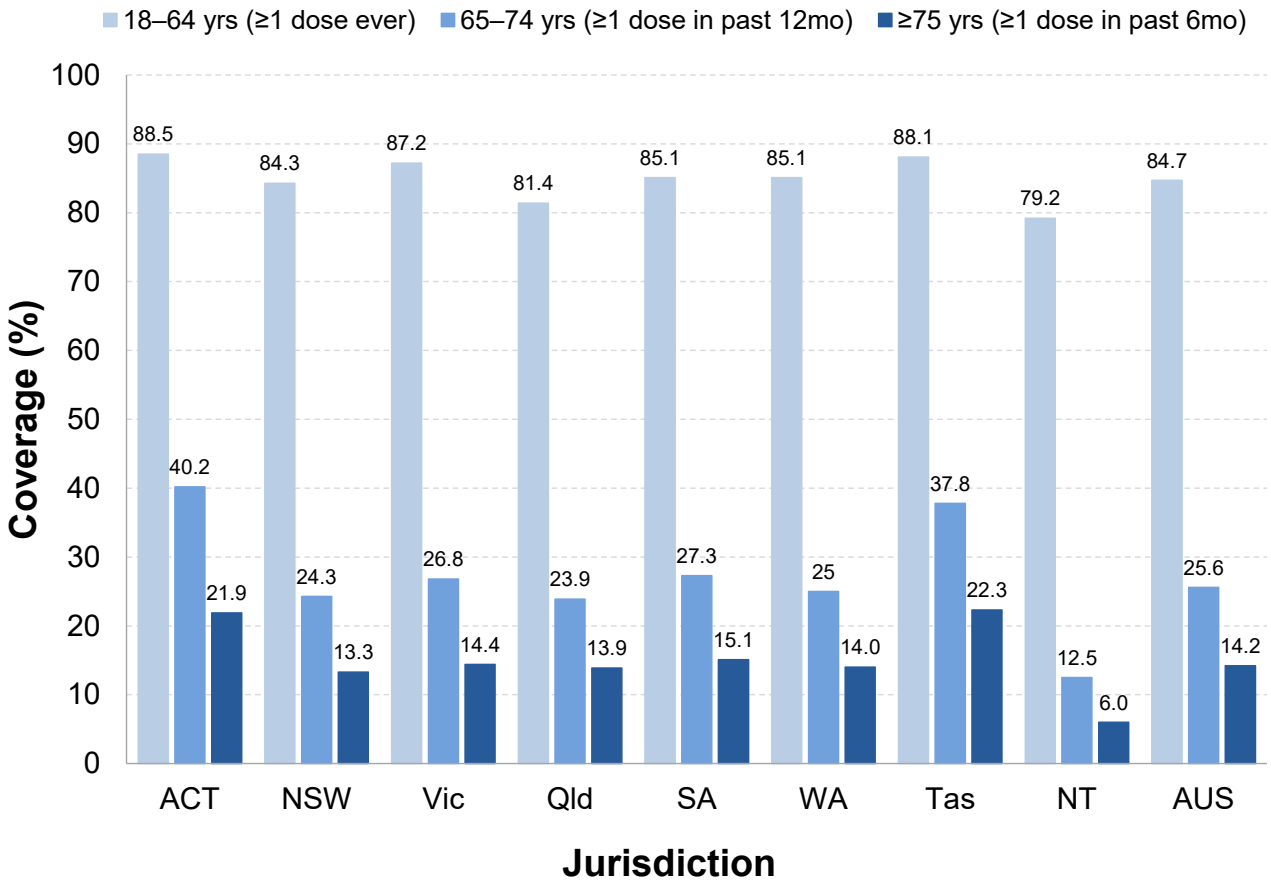
Figure 33. Up-to-date* coverage for COVID-19 vaccination for adults by age group† and jurisdiction, Australia, 2024



* Up-to-date vaccination coverage COVID-19 was assessed as at 31 December 2024 in line with Australian Immunisation Handbook recommendations in place during 2024: i.e. adults aged 18–64 years were deemed up to date for COVID-19 vaccination if they had ever received at least one dose of a COVID-19 vaccine; adults aged 65–74 years were deemed up to date for COVID-19 vaccination if they had received at least one dose of a COVID-19 vaccine in the previous 12 months (i.e. during 2024) and adults aged ≥75 years were deemed up to date for COVID-19 vaccination if they had received at least one dose of a COVID-19 vaccine in the previous 6 months (i.e. since 1 July 2024). Up-to-date COVID-19 vaccination coverage was calculated by dividing the number of Medicare-registered adults deemed up-to-date as at 31 December 2024 by the total number of Medicare-registered adults registered in each age group. Note: The COVID-19 vaccination data included in this report was calculated using AIR data for both the numerator and denominator and therefore differs from COVID-19 vaccination data available elsewhere.[20]

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025

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Vaccination provider setting

In 2024, the majority of NIP vaccinations (excluding influenza) given to adults in Australia were administered in general practice settings (56.3% for those aged 20–64 years and 83.0% for ≥65 years), followed by pharmacy settings (22.0% and 9.2%, respectively) (Figure A8). General practice was the most common setting for adult influenza vaccination (38.5% for those aged 20–64 years and 74.7% for ≥65 years), followed by pharmacy (32.4% and 17.6%, respectively) (Figure A8). For COVID-19 vaccinations, pharmacy was the most common setting for adults aged 20–64 years (52.5%), followed by general practice (41.1%), while general practice was the most common setting for adults aged ≥65 years (60.1%), followed by pharmacy (34.8%) (Figure A8). A considerably lower percentage of NIP and influenza vaccinations were given in general practice in the Northern Territory than in other jurisdictions (Table A13).

Aboriginal and Torres Strait Islander Adults

Zoster vaccination

Shingrix uptake in NIP-eligible population aged ≥50 years

As at 31 December 2024, 118,845 and 57,906 Aboriginal and Torres Strait Islander adults aged 50–64 years and ≥65 years, respectively, were estimated to be eligible to receive Shingrix under the NIP following its inclusion on 1 November 2023. Of the eligible Aboriginal and Torres Strait Islander adults, 34.1% of those aged ≥65 years and 13.9% of those aged 50–64 years received at least one dose of Shingrix between 1 November 2023 and 31 December 2024, with 23.2% and 7.4%, respectively, having received two or more doses over this period (Table 6). By jurisdiction, uptake of at least one dose of Shingrix in the NIP-eligible population aged ≥65 years ranged from 20.0% (9.3% for two or more doses) in the Northern Territory to 47.2% (33.3% for two or more doses) in Tasmania. In the NIP-eligible population aged 50–64 years from 10.2% in Victoria (5.3% for two or more doses in Western Australia) to 18.1% (11.5% for two or more doses) in the Australian Capital Territory (Table 6).

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Table 6. Shingrix vaccine uptake by 31 December 2024* in the NIP- eligible Aboriginal and Torres Strait Islander population† by jurisdiction, Australia

		ACT	NSW	Vic	Qld	SA	WA	Tas	NT	AUS
50–64 years	**Number NIP-Eligible**	1165	37643	10482	34119	6014	14310	3997	11115	118845
	% total uptake of at least one dose post-NIP‡	**18.1**	**13.4**	**10.2**	**15.5**	**13.6**	**10.6**	**15.4**	**17.6**	**13.9**
	% Dose 1 only post-NIP	6.3	5.4	4.0	7.2	6.1	5.3	5.7	11.1	6.4
	% Dose 1 + Dose 2 post-NIP	11.5	7.8	6.1	8.3	7.4	5.3	9.7	6.4	7.4
≥65 years	**Number NIP-Eligible**	487	20054	5767	15623	2979	6164	2295	4537	57906
	% total uptake of at least 1 dose post-NIP‡	**45.2**	**36.3**	**34.6**	**35.4**	**36.8**	**26.8**	**47.2**	**20.0**	**34.1**
	% Dose 1 only post-NIP	11.7	10.6	9.3	11.1	11.8	9.7	13.6	10.6	10.7
	% Dose 1 + Dose 2 post-NIP	32.4	25.5	25.1	24.1	24.9	17.0	33.3	9.3	23.2
≥50 years	**Number NIP-Eligible**	1652	57697	16249	49742	8993	20474	6292	15652	176751
	% total uptake of at least 1 dose post-NIP‡	**26.1**	**21.3**	**18.8**	**21.8**	**21.3**	**15.5**	**27.0**	**18.3**	**20.5**
	% Dose 1 only post-NIP	7.9	7.2	5.9	8.4	8.0	6.6	8.6	11.0	7.8
	% Dose 1 + Dose 2 post-NIP	17.7	14.0	12.8	13.2	13.2	8.8	18.3	7.3	12.6

* Shingrix vaccine uptake was calculated as a proportion i.e. the number of NIP-eligible Aboriginal and Torres Strait Islander adults aged 50–64 years, ≥65 years and ≥50 years who received at least one dose of Shingrix vaccine between 1 November 2023 (i.e. from the date Shingrix was introduced onto the NIP) and 31 December 2024 divided by the number of NIP-eligible Aboriginal and Torres Strait Islander adults in each age group based on age at 31 December 2024. Receipt of at least one dose of Shingrix vaccine was categorised as a) 'Dose 1 pre-NIP + Dose 2 post-NIP' (i.e. receipt of one dose of Shingrix before its inclusion on the NIP and another dose after its inclusion on the NIP with interval of at least 4 weeks between doses); b) 'Dose 1 only post-NIP' (i.e. receipt of only one dose of Shingrix, or two doses less than 4 weeks apart, after its inclusion on the NIP, where Dose 1 not received pre-NIP); and c) 'Dose 1 + Dose 2 post-NIP' (i.e. receipt of two doses of Shingrix, at least 4 weeks apart, after its inclusion on the NIP, where Dose 1 not received pre-NIP).

† All Aboriginal and Torres Strait Islander adults aged ≥50 years are eligible for funded Shingrix vaccine on the NIP. However, individuals need to wait 5 years if they have previously received Zostavax through the NIP, or 12 months if they have received Zostavax privately. As the AIR data analysed did not include information on whether previous doses were NIP- or privately funded, Aboriginal and Torres Strait Islander adults with a prior dose of Zostavax were defined as eligible for Shingrix if Zostavax was given at age 70–79 years more than 5 years previously as at 31 December 2024 (i.e. Zostavax received on/prior to 31 December 2019), or if Zostavax was given at age <70 years or ≥80 years more than 12 months previously as at 31 December 2024 (i.e. Zostavax received between 1 January 2024 – 31 December 2024). Aboriginal and Torres Strait Islander adults aged ≥50 years with an AIR record of a first dose of Shingrix received prior to it becoming available on the NIP (Shingrix had been available on private prescription since June 2021) were also included in the defined NIP-eligible population of Aboriginal and Torres Strait Islander adults. Note: Aboriginal and Torres Strait Islander adults aged ≥50 years who had received two doses of Shingrix, with interval of at least 4 weeks between doses, before 1 November 2023 were excluded from the NIP-eligible population.

‡ The % total uptake of at least 1 dose post-NIP also includes the small percentage of Aboriginal and Torres Strait Islander adults in each age group who received one dose of Shingrix before its inclusion on the NIP and then at least one subsequent dose of Shingrix following its inclusion on the NIP with the two doses given at least 4 weeks apart (data not shown).

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025.

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Zoster vaccination coverage

Zoster vaccination coverage is defined as ever having received one dose of Zostavax, or two doses of Shingrix given at least 4 weeks apart. For Aboriginal and Torres Strait Islander adults aged ≥65 years in 2024, it was 42.2% nationally, with coverage by jurisdiction ranging from 24.9% in the Northern Territory to 53.7% in Tasmania (Figure 34). In contrast, zoster vaccination coverage for adults aged 50–64 years in 2024 was below 13% in all jurisdictions even though it is funded for Aboriginal and Torres Strait Islander adults from 50 years of age (Figure 34). For all Aboriginal and Torres Strait Islander adults aged ≥50 years in 2024, zoster vaccination coverage was 20.3% nationally, with coverage by jurisdiction ranging from 12.3% in the Northern Territory to 27.8% in Tasmania (data not shown). In all jurisdictions except the Northern Territory and Western Australia, more than 21% of Aboriginal and Torres Strait Islander adults aged ≥65 years had received two doses of Shingrix at least 4 weeks apart. By jurisdiction, an additional 8.5–14.7% of adults aged ≥65 years had not received two doses of Shingrix at least 4 weeks apart but had received a dose of Zostavax less than five years previously. An additional 5.9–9.7% had not received two doses of Shingrix at least 4 weeks apart but had received a dose of Zostavax five or more years previously (Figure 34). An additional 7.9% of Aboriginal and Torres Strait Islander adults ≥65 years had no record of Zostavax and only one dose of Shingrix, with percentages ranging from 6.6% in Victoria to 9.6% in Tasmania (data not shown).

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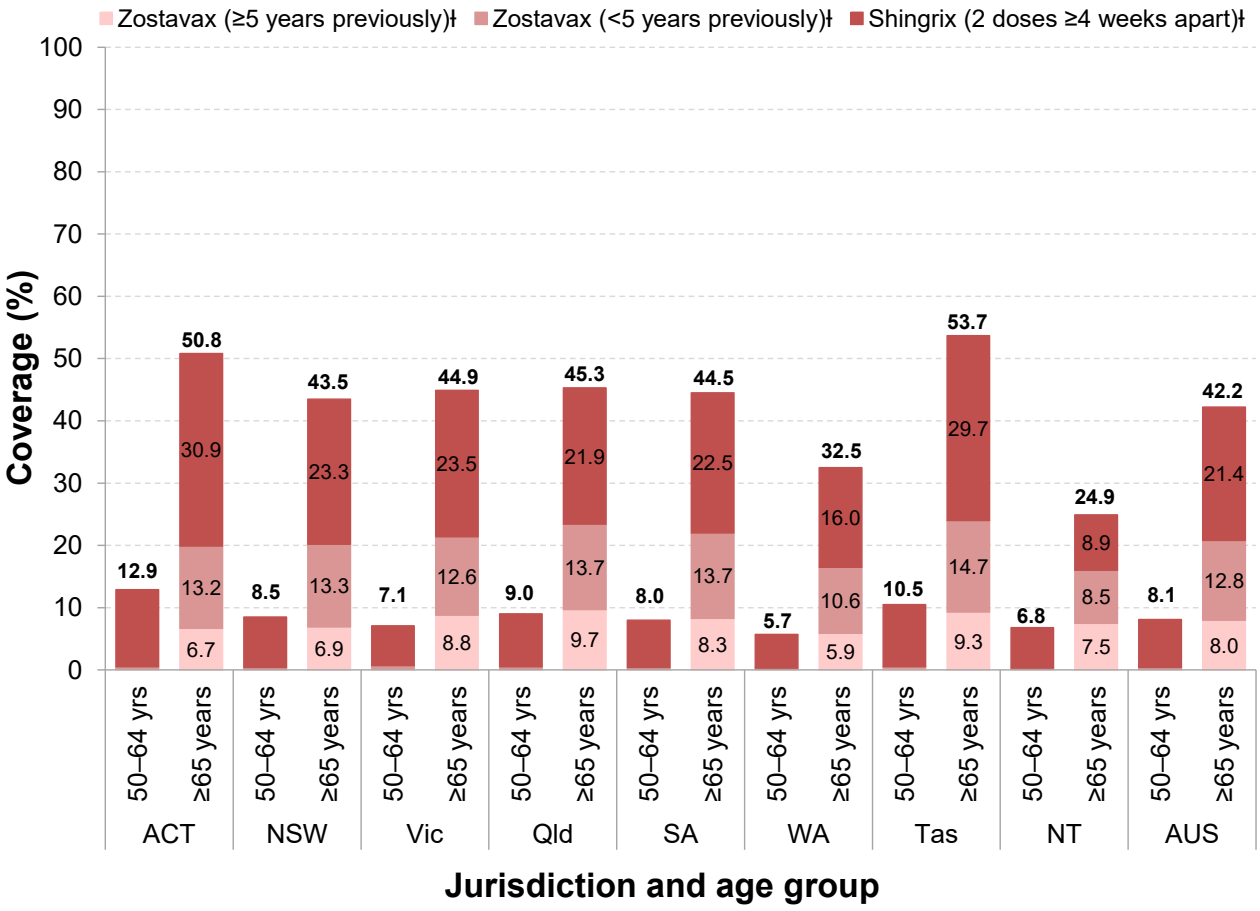
Figure 34. Zoster vaccination coverage* in Aboriginal and Torres Strait Islander adults aged ≥50 years by vaccine brand, age group and jurisdiction, Australia, 2024.



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adults in each age group with AIR records of either receipt of 1 dose of Zostavax or 2 doses of Shingrix (if given at least 4 weeks apart) by 31 December 2024 as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adults in the relevant age group as the denominator, expressed as a percentage.

ǂ The proportion of overall zoster vaccination coverage by vaccine brand was calculated and categorised as a) receipt of at least two doses of Shingrix given at least 4 weeks apart, irrespective of whether Zostavax had been received previously; b) receipt of at least one dose of Zostavax less than 5 years previously (i.e. received between 1 January 2020 – 31 December 2024), where two doses of Shingrix at least 4 weeks apart had not been received and c) receipt of at least one dose of Zostavax 5 or more years previously (i.e. received on/prior to 31 December 2019), where two doses of Shingrix at least 4 weeks apart had not been received.

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025.

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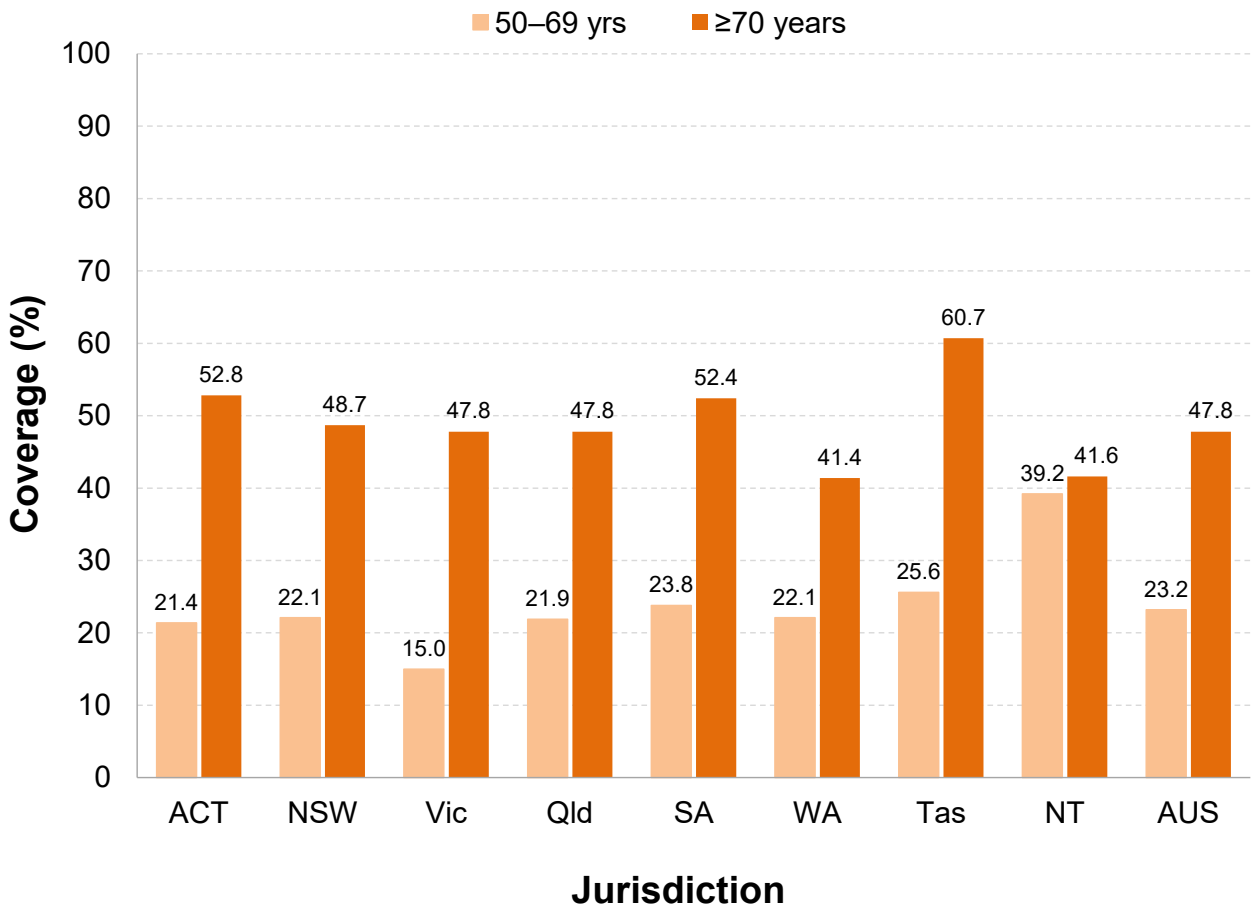
Pneumococcal vaccination coverage

Vaccination coverage of an adult dose of 13vPCV for the Aboriginal and Torres Strait Islander adults aged ≥70 years in 2024 was 47.8% nationally, with coverage by jurisdiction ranging from 41.4% in Western Australia to 60.7% in the Tasmania (Figure 35). In contrast, coverage of an adult dose of 13vPCV for Aboriginal and Torres Strait Islander adults aged 50–69 years in 2024 was considerably lower in all jurisdictions except the Northern Territory, at close to 40% in the Northern Territory but less than 26% in other all jurisdictions (Figure 35). For all Aboriginal and Torres Strait Islander adults aged ≥50 years in 2024, coverage of an adult dose of 13vPCV was 28.5% nationally, with coverage by jurisdiction ranging from 23.1% in Victoria to 39.6% in the Northern Territory (data not shown).

Figure 35. Coverage of an adult dose of 13vPCV* for Aboriginal and Torres Strait Islander adults aged ≥50 years in 2024 by age group and jurisdiction, Australia, 2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adults in each age group with an AIR record of having received an adult dose of 13vPCV by 31 December 2024 as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adults in each age group as the denominator, expressed as a percentage.

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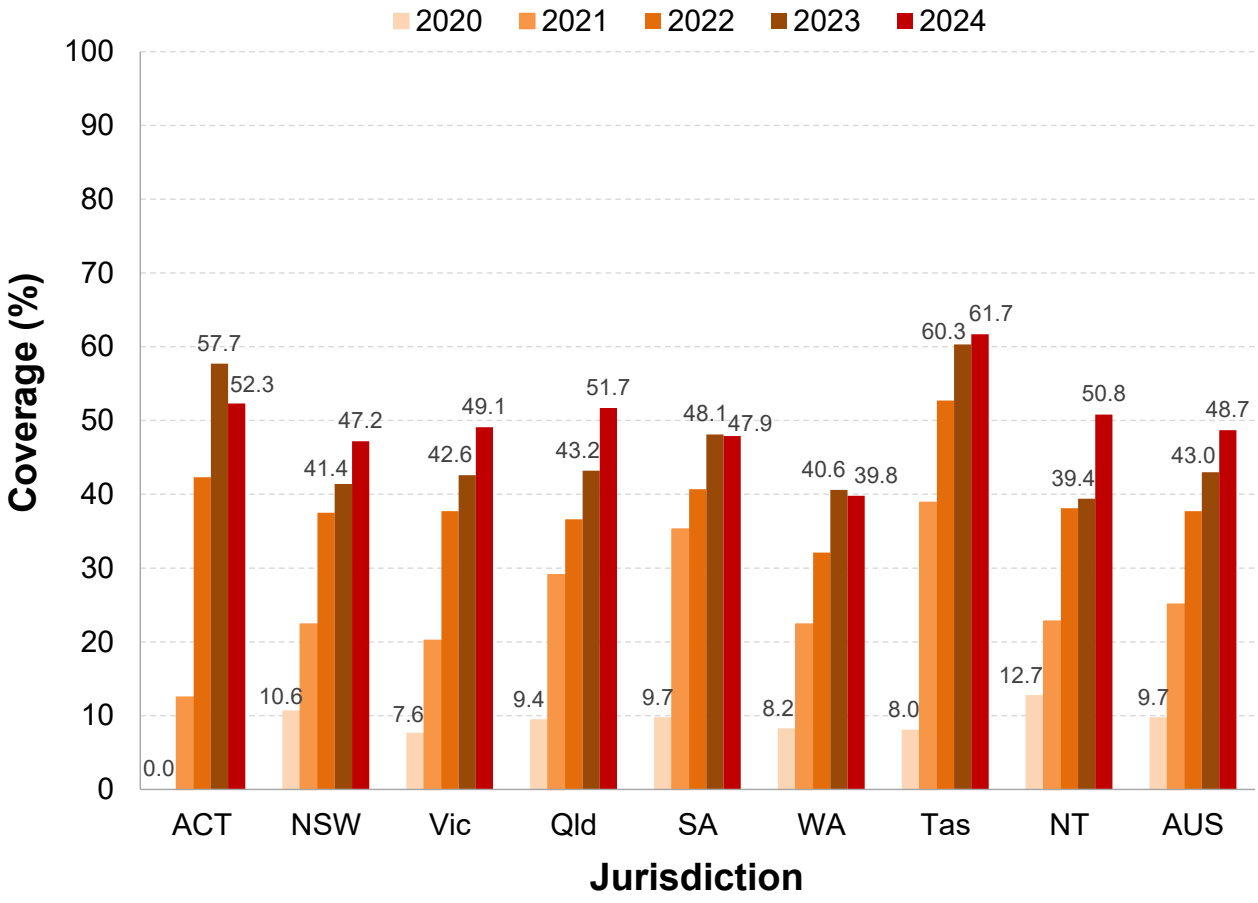
ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025.

Coverage of an adult dose of 13vPCV in Aboriginal and Torres Strait Islander adults turning 71 years in 2024 was 48.7% overall in 2024, up from 43.0% in 2023, and ranged from 39.8% in Western Australia to 61.7% in Tasmania (Figure 36).

Figure 36. Coverage of an adult dose of 13vPCV* in Aboriginal and Torres Strait Islander adults turning 71 years of age† in the year of interest, by jurisdiction, Australia, 2020–2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adults in each year-wide cohort with an AIR record of having received an adult dose of 13vPCV by 31 December of the relevant year as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adults in the relevant cohort as the denominator, expressed as a percentage

Note: The 2020 and 2021 data points differ to what was presented in the 2021 report due to vaccinations given after 71 years of age in the relevant year now being included in the coverage calculations.

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† Cohorts born 1 January–31 December 1949 for 2020 coverage; 1 January–31 December 1950 for 2021 coverage; 1 January–31 December 1951 for 2022 coverage; 1 January–31 December 1952 for 2023 coverage; and 1 January–31 December 1953 for 2024 coverage.
ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 3 April 2022 (for 2020 and 2021 coverage), 2 April 2023 (for 2022 coverage), 4 February 2024 (for 2023 coverage), and 2 February 2025 (for 2024 coverage).

Influenza vaccination coverage

Influenza vaccination coverage in Aboriginal and Torres Strait Islander adults in 2024 was lower than in 2023 for each adult age groups, decreasing from 22.3% to 20.6% in the 20 to <50 years age group, 42.2% to 39.0% in the 50 to <65 years age group and 64.1% to 61.9% in the ≥65 years age group (Figure 10). Coverage was lower in 2024 than in 2023 across all adult age groups in all jurisdictions except for 20 to <50 years and 50 to <65 years in the Australian Capital Territory (Table A12 in the Appendix).

Adult composite measure of vaccination coverage

Using a composite measure – a dose of influenza vaccine in the calendar year of interest, an adult dose of 13vPCV and either 1 dose of Zostavax (if Zostavax received in the past 5 years) or 2 doses of Shingrix vaccine (given at least 4 weeks apart)– coverage was 28.3% in Aboriginal and Torres Strait Islander adults turning 71 years in 2024, 3.7 and 5.7 percentage points higher than the corresponding figures for 2023 and 2022, respectively (Figure 37). Coverage using this composite measure by jurisdiction in 2024 ranged from 18.9% in Western Australia to 42.0% in Tasmania (Figure 37).

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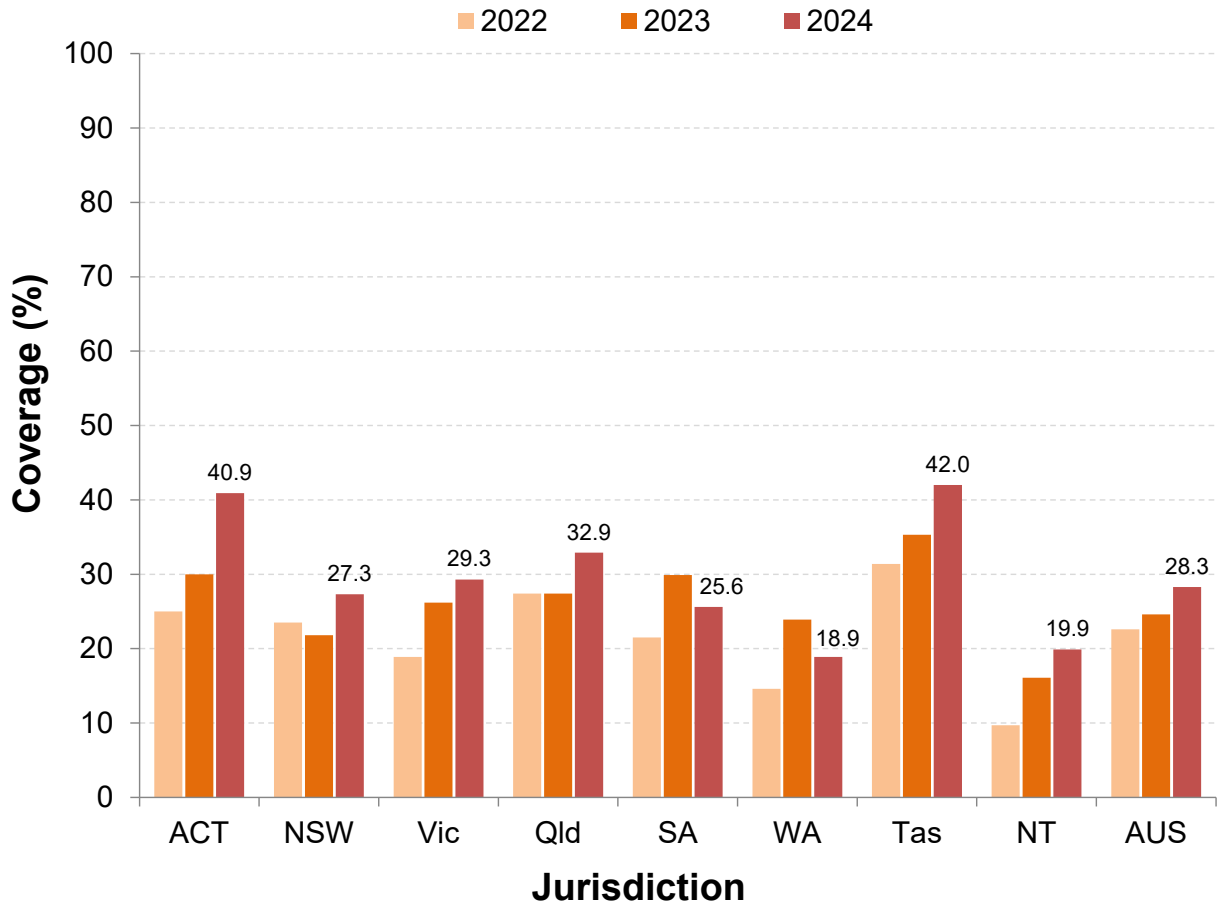
Figure 37. Vaccination coverage using composite measure* in Aboriginal and Torres Strait Islander adults turning 71 years of age in relevant year,† by jurisdiction, Australia, 2022–2024



* Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adults in each cohort with an AIR record of a dose of influenza vaccine in the calendar year of interest, an adult dose of 13vPCV and either 1 dose of Zostavax (if Zostavax received in the previous 5 years, relevant to the calendar year of interest) or 2 doses of Shingrix vaccine (given at least 4 weeks apart) by the end of the relevant year as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adults in the relevant cohort as the denominator, expressed as a percentage

† Cohorts born 1 January–31 December 1951 for 2022 coverage, 1 January–31 December 1952 for 2023 coverage and 1 January–31 December 1953 for 2024 coverage

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025 (for 2022-2024 coverage).

Up-to-date diphtheria, tetanus and pertussis vaccination coverage

Nationally, 41.2% of Aboriginal and Torres Strait Islander adults aged 50–64 years and 41.5% of adults aged ≥65 years were up-to-date for diphtheria vaccination in 2024, with up-to-date coverage for tetanus vaccination similar at 41.3% and 41.6%, respectively, for these age groups (Figure 38).

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By jurisdiction, up-to-date coverage for diphtheria vaccination for Aboriginal and Torres Strait Islander adults aged 50–64 years and ≥65 years ranged from 31.1% and 28.5%, respectively, in Western Australia to 69.6% and 66.5%, respectively, in the Northern Territory (Table 7), with similar patterns seen for up-to-date coverage for tetanus vaccination. Up-to-date coverage for diphtheria and tetanus vaccination was higher for Aboriginal and Torres Strait Islander adults aged ≥65 years than 50–64 years in all jurisdictions except in Victoria, Western Australia and the Northern Territory (Table 7). Up-to-date coverage for pertussis vaccination was 13.4 – 15.6 percentage points lower than for diphtheria and tetanus vaccination, at 27.8% for Aboriginal and Torres Strait Islander adults aged 50–64 years and 26.0% for those aged ≥65 years (Figure 38). By jurisdiction, up-to-date coverage for pertussis vaccination for Aboriginal and Torres Strait Islander adults aged 50–64 years and ≥65 years ranged from 17.0% and 16.2%, respectively, in Western Australia to 46.3% and 40.6%, respectively, in the Northern Territory (Table 7). Up-to-date coverage for pertussis vaccination in Aboriginal and Torres Strait Islander adults was lower for those aged ≥65 years than 50–64 years in all jurisdictions except in the Australian Capital Territory (Table 7).

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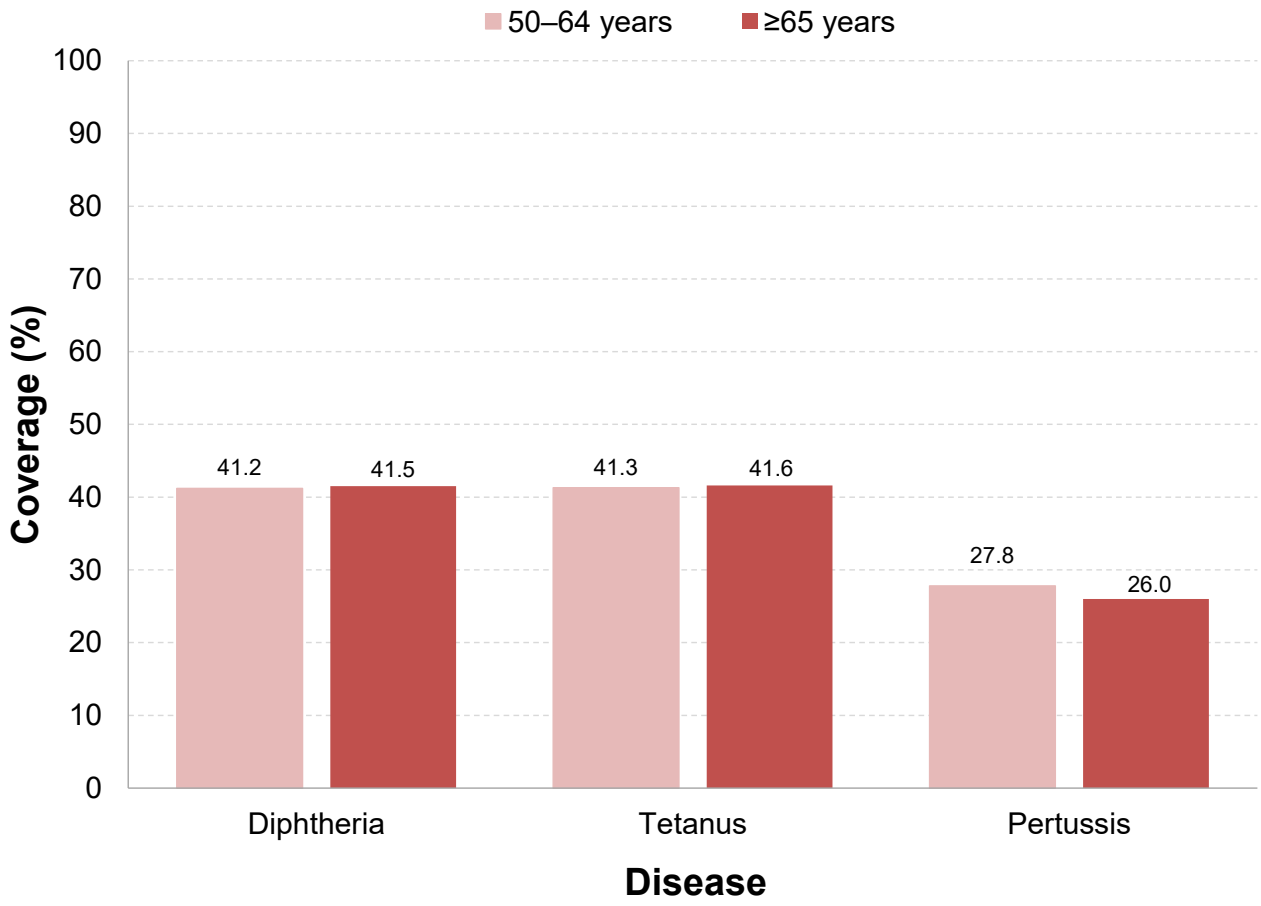
Figure 38. 'Up-to-date'* coverage for adult diphtheria, tetanus and pertussis vaccination in Aboriginal and Torres Strait Islander adults aged ≥50 years by age group,† Australia, 2024



* Up-to-date vaccination coverage for diphtheria, tetanus and pertussis was assessed in line with Australian Immunisation Handbook recommendations: i.e. Aboriginal and Torres Strait Islander adults ≥50 years were deemed up to date for tetanus and diphtheria vaccination if they had received a tetanus or diphtheria-containing vaccine after the age of 40 years, and up to date for pertussis vaccination if they had received a pertussis-containing vaccine after the age of 40 years (for those aged 50–64 years) or 55 years (for those aged ≥65 years). Up-to-date vaccination coverage for each antigen was calculated by dividing the number of Medicare-registered Aboriginal and Torres Strait Islander adults deemed up-to-date as at 31 December 2024 by the total number of Medicare-registered Aboriginal and Torres Strait Islander adults registered in each age group. Note: up-to-date vaccination coverage for these antigens are likely to be under-estimates as the AIR only expanded to include adult vaccinations in 2016, and the reporting of adult tetanus, diphtheria, and pertussis vaccinations is not currently mandatory.
† Age groups based on age at 31 December 2024.

Source: Australian Immunisation Register data as at 2 February 2025

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Table 7. Up-to-date* coverage for adult diphtheria, tetanus and pertussis vaccination in Aboriginal and Torres Strait Islander adults aged ≥50 years by age group† and jurisdiction, Australia, 2024

	% up-to-date					
	Diphtheria		Tetanus		Pertussis	
	50–64 years	≥65 years	50–64 years	≥65 years	50–64 years	≥65 years
Australian Capital Territory	36.2	44.4	36.3	44.4	25.8	35.1
New South Wales	39.7	40.0	39.8	40.1	29.4	28.4
Victoria	37.2	35.0	37.3	35.2	26.7	24.7
Queensland	40.1	44.2	40.2	44.4	25.2	23.0
South Australia	35.1	35.4	35.2	35.5	23.9	22.4
Western Australia	31.1	28.5	31.3	28.6	17.0	16.2
Tasmania	43.2	45.4	43.4	45.7	31.1	30.2
Northern Territory	69.6	66.5	69.6	66.5	46.3	40.6

* Up-to-date vaccination coverage for diphtheria, tetanus and pertussis was assessed in line with Australian Immunisation Handbook recommendations: i.e. Aboriginal and Torres Strait Islander adults ≥50 years were deemed up to date for tetanus and diphtheria vaccination if they had received a tetanus or diphtheria-containing vaccine after the age of 40 years, and up to date for pertussis vaccination if they had received a pertussis-containing vaccine after the age of 40 years (for those aged 50–64 years) or 55 years (for those aged ≥65 years). Up-to-date vaccination coverage for each antigen was calculated by dividing the number of Medicare-registered Aboriginal and Torres Strait Islander adults deemed up-to-date as at 31 December 2024 by the total number of Medicare-registered Aboriginal and Torres Strait Islander adults registered in each age group. Note: up-to-date vaccination coverage for these antigens are likely to be under-estimates as the AIR only expanded to include adult vaccinations in 2016, and the reporting of adult tetanus, diphtheria, and pertussis vaccinations is not currently mandatory.
† Age groups based on age at 31 December 2024.

Source: Australian Immunisation Register data as at 2 February 2025

Up-to-date COVID-19 vaccination

Nationally, 86.8% of Aboriginal and Torres Strait Islander adults aged 18–64 years had received at least one dose of a COVID-19 vaccine ever by 31 December 2024 (ranging from 81.8% in South Australia to 92.3% in the Australian Capital Territory) (Figure 39), with only 3.4% having received at least one dose in the past 12 months (i.e. during 2024) (data not shown). As at 31 December 2024, 91.9% of Aboriginal and Torres Strait Islander adults aged 65–74 years had received at least one dose ever (data not shown), with 20.6% having received at least one dose in the past 12 months (i.e. during 2024), ranging by jurisdiction from 9.8% in the Northern Territory to 39.7% in the Australian Capital Territory (Figure 39). For Aboriginal and Torres Strait Islander adults aged ≥75 years, 89.9% had years had received at least one dose ever by 31 December 2024, 29.9% had received at least one dose in the past 12 months (i.e. during 2024) (data not shown) and

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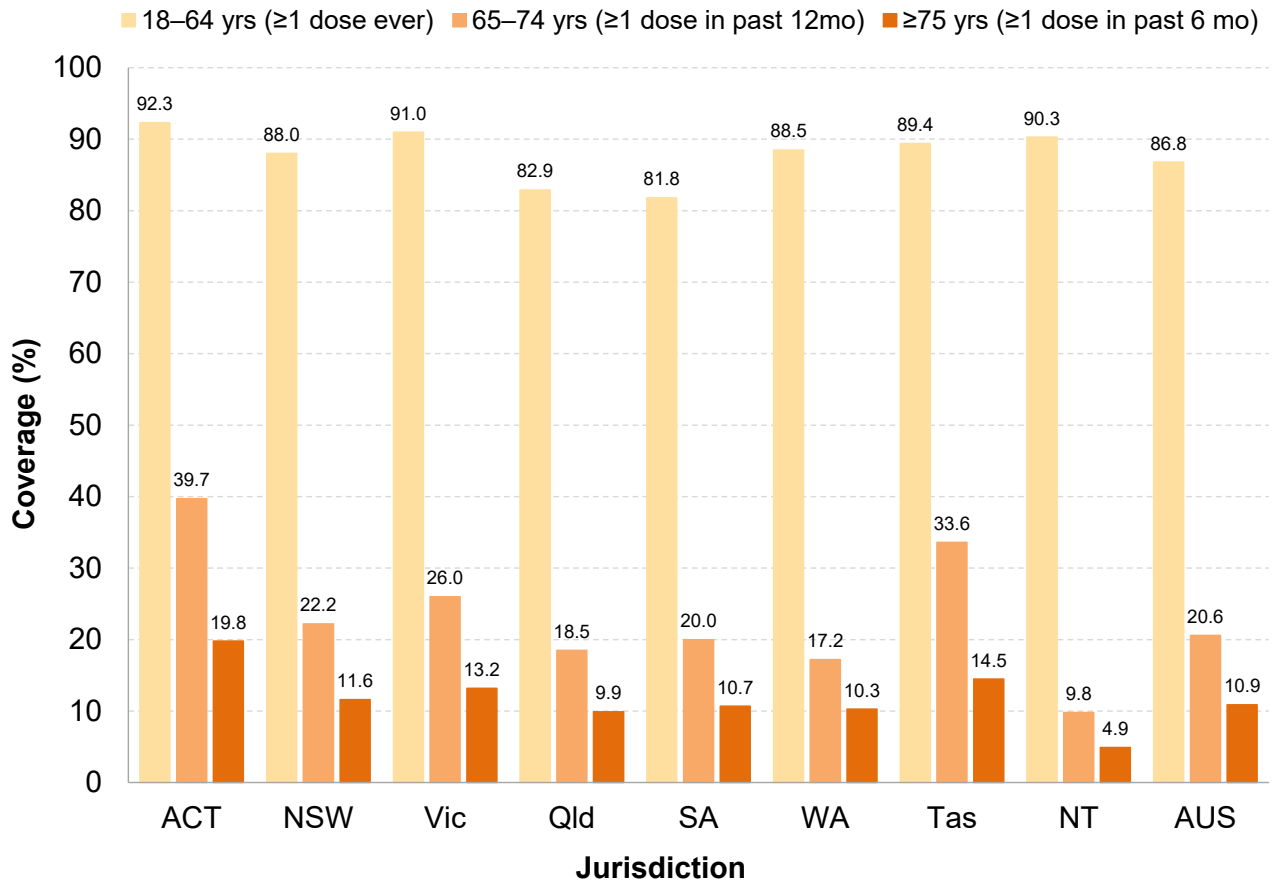
11.0% had received at least one dose in the past 6 months as at 31 December 2024 (i.e. since 1 July 2024), ranging from 5.0% in the Northern Territory to 21.6% in the Australian Capital Territory (Figure 39). Only 3.7% of Aboriginal and Torres Strait Islander adults aged ≥75 years had received two doses during 2024 (i.e. one dose between 1 January – 30 June and a second dose between 1 July – 31 December) (data not shown).

Figure 39. Up-to-date* coverage for COVID-19 vaccination for Aboriginal and Torres Strait Islander adults by age group† and jurisdiction, Australia, 2024



* Up-to-date vaccination coverage COVID-19 was assessed as at 31 December 2024 in line with Australian Immunisation Handbook recommendations in place during 2024: i.e. Aboriginal and Torres Strait Islander adults aged 18–64 years were deemed up to date for COVID-19 vaccination if they had ever received at least one dose of a COVID-19 vaccine; Aboriginal and Torres Strait Islander adults aged 65–74 years were deemed up to date for COVID-19 vaccination if they had received at least one dose of a COVID-19 vaccine in the previous 12 months (i.e. during 2024) and Aboriginal and Torres Strait Islander adults aged ≥75 years were deemed up to date for COVID-19 vaccination if they had received at least one dose of a COVID-19 vaccine in the previous 6 months (i.e. since 1 July 2024). Up-to-date COVID-19 vaccination coverage was calculated by dividing the number of Medicare-registered Aboriginal and Torres Strait Islander adults deemed up-to-date as at 31 December 2024 by the total number of Medicare-registered Aboriginal and Torres Strait Islander adults registered in each age group. Note: The COVID-19 vaccination data included in this report was calculated using AIR data for both the numerator and denominator and therefore differs from COVID-19 vaccination data available elsewhere.[20]

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory; AUS = Australia

Source: Australian Immunisation Register data as at 2 February 2025

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Vaccination provider setting

In 2024, the majority of NIP vaccinations (excluding influenza) given to Aboriginal and Torres Strait Islander adults in Australia were administered in general practice settings (51.7% for those aged 20–64 years and 73.0% for those aged ≥65 years) (Figure A9), Broadly similar patterns were seen for influenza and COVID-19 vaccination in Aboriginal and Torres Strait Islander adults, but with a substantial percentage of COVID-19 vaccinations given in pharmacy settings (28.0% in adults aged 20–64 years and 25.8% in adults aged ≥65 years. The proportion of vaccinations in Aboriginal and Torres Strait Islander adults given in Aboriginal Health settings at national level ranged from 6.3% for COVID-19 in adults aged ≥65 years to 17.4% for NIP vaccines (excluding influenza) in adults aged 20–64 years, but was considerably higher in the Northern Territory than in other jurisdictions (NIP vaccines excluding influenza – 50.6% for adults aged 20–64 years and 45.6% for adults aged ≥65 years; influenza – 55.7% and 49.3%, respectively; COVID-19 – 37.1% and 31.2%) (Table A14). However, it should be noted that in Aboriginal Health provider settings the reported proportion may be underestimated due to vaccinations given by general practitioners or pharmacists working in or visiting these settings being linked to provider numbers associated with other (mainstream) general practices or pharmacies.

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Discussion

This report documents persistent and concerning downward trends in childhood and adolescent vaccination coverage in Australia since the advent of the COVID-19 pandemic, as detailed further below. Coverage in adults also remains at low and suboptimal levels. The *National Immunisation Strategy for Australia 2025–2030*,[21] which aligns with the aims of the World Health Organization (WHO) *Immunization Agenda 2030* (IA2030),[22] includes a range of measures aimed at improving vaccination coverage. It will be important to implement and assess the impact of these measures on coverage in future reports.

Vaccination coverage in population overall

Children

Fully vaccinated coverage in Australian children in this 2024 report was 0.6–1.4 percentage points lower than in our 2023 report at the 12-month (91.6%, down from 92.8%), 24-month (89.4%, down from 90.8%) and 60-month (92.7%, down from 93.3%) age assessment milestones.[15,23] This follows the 1.2–2.0 percentage point decrease at these three milestones between the 2020 and 2023 reports,[14-16,23] which came after approximately eight years of generally increasing coverage.[8-14] Due to the lag time involved in fully vaccinated coverage assessment, fully vaccinated childhood coverage figures in this 2024 report predominantly represent vaccinations due in 2023.

Factors that continue to contribute to the ongoing decline in vaccination coverage in Australian children include:

- concerns regarding the safety and the necessity of vaccines
- the increasing number of vaccines on the National Immunisation Program (NIP) schedule
- ‘vaccine fatigue’
- reduced confidence in the importance of childhood vaccination
- increased polarisation related to the intense attention given to COVID-19 vaccination and associated mandates.

The decline is also related to how these vaccine acceptance factors combine with access issues such as:

- difficulty obtaining general practice (GP) appointments
- reduced bulk-billing and increases in other costs

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- reduced parental/carer/individual prioritisation of the time and budget required to undertake vaccination.[24-29]

'On-time' vaccination in young children (where a vaccine is received within 30 days of the recommended age) has not returned to pre-pandemic levels, with on-time coverage for the second dose of DTPa and the first dose of measles-mumps-rubella (MMR)-containing vaccine 6.1–9.6 percentage points lower in 2024 than in 2019. This opens up gaps in immunity to diseases at ages when risk is high. It is also associated with lower completion of vaccination schedules when compared with those in the same age cohort who received timely vaccination.

Coverage was lower in 2024 than in 2023 for all individual vaccines/antigens assessed at the 12-month, 24-month and 60-month age milestones. In the context of Australia's 95% coverage targets – which are particularly critical to measles control – coverage was lower at 24 months of age in 2024 than 2023 for both the first dose of measles-containing vaccine (94.0% versus 94.7%, respectively) and the second dose (91.4% versus 92.5%). However, coverage for the second dose of measles-containing vaccine assessed at 60 months of age, while slightly lower in 2024 than 2023 (96.1% versus 96.4%, respectively) remained above the 95% target, indicating that some catch-up vaccination is occurring in later childhood. A global resurgence in measles[30] and recurrent importations to Australia increase the risk of local transmission, underpinning the need to improve timely and more complete vaccine uptake at the 12- and 18-month milestones. An early dose (from 6 months of age) should be considered for children who travel overseas to at-risk countries.[31]

Influenza vaccination coverage in children aged 6 months to 4 years continued to decline, reaching 27.6% in 2024, down from 30.3% in 2023 and above 40% in both 2019 and 2020.[14] A national, cross-sectional survey of parents of children aged less than 5 years in 2024 identified a range of acceptance and access barriers to parents vaccinating their young children against influenza.[32] Given the survey responses, it may be necessary to optimise access and encourage parents to prioritise influenza vaccination alongside routine childhood vaccines by emphasising disease risk and the importance, safety and effectiveness of influenza vaccination.

Adolescents

In 2024, 81.1% of Australian girls had received at least one dose of HPV vaccine by their fifteenth birthday (the WHO-recommended milestone for comparison purposes) – this has trended down from 86.6% in 2020. Similarly, 77.9% of boys, as compared with 84.9% in 2020, had received at least one dose. These coverage trends are concerning in relation to the *National Strategy for the Elimination of Cervical Cancer in Australia* coverage targets of 90% for both girls and boys by 2030.[33] Given that we found coverage of at least one dose of HPV vaccine in 2024 by the fifteenth

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birthday was 5.0–10.7 percentage points lower in adolescents residing in socio-economically disadvantaged and remote areas, there also needs to be a renewed focus on equitable coverage across disadvantaged groups.

Coverage of an adolescent dose of diphtheria-tetanus-pertussis vaccine in adolescents turning 15 years in 2024 (measured to the end December 2024) was 84.4% in girls and 80.9% boys. However, this coverage differential between sexes narrowed in older age groups to only 1.4 percentage points in adolescents turning 18 years in 2024. Coverage of an adolescent dose of meningococcal ACWY vaccine in adolescents turning 16 years in 2024 (to end 2024) was 68.5% in girls, 4.1 percentage points higher than in boys (64.4%), with coverage increasing with age for both girls and boys.

For the third time in this series of annual reports, we also calculated adolescent coverage using composite measures, as previously recommended,[19] to assess overall uptake in the adolescent immunisation program. Coverage for adolescents turning 15 years of age in the relevant year, using a composite measure comprising at least one dose of HPV vaccine and an adolescent dose of diphtheria-tetanus-pertussis vaccine, was 79.1% in 2024, down from 82.6% in 2023 and 83.7% in 2022.[16,23] Coverage for adolescents turning 18 years of age in the relevant year, using a more comprehensive composite measure comprising at least one dose of HPV vaccine, an adolescent dose of diphtheria-tetanus-pertussis vaccine and an adolescent dose of meningococcal ACWY, was 70.3% in 2024, down from 73.0% in 2023 and 73.4% in 2022.[16,23]

A distinct range of access and acceptance issues, including pragmatic issues related to delivery primarily via school-based immunisation programs, are likely to have contributed to the decreases in adolescent vaccine coverage. It will be important to further investigate the factors underpinning these declines and to design and implement evidence-based strategies to increase vaccine uptake in school-based programs as well as effective catch-up vaccination in other provider settings, including GP and pharmacy.

Adults

Nationally, 34.1% of the NIP-eligible population of adults aged ≥65 years received at least one dose of Shingrix between 1 November 2023 and 31 December 2024, with 25.6% receiving two doses in this period. Zoster vaccination coverage, defined as the receipt (before or after inclusion of Shingrix on the NIP) of one dose of Zostavax or two doses of Shingrix given at least 4 weeks apart, was 45.9% for adults aged ≥65 years in 2024. This coverage is suboptimal given the high risk of shingles in this age group. This is particularly so as, despite being eligible for Shingrix

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vaccination under the NIP, one in five of these vaccinated adults had only received Zostavax more than 5 years previously, after which time protection wanes significantly.[31]

Coverage of 13vPCV – which was introduced on to the NIP for all adults aged 70 years and over in July 2020 – was 38.6% in adults turning 71 years of age in 2024, 1 percentage point higher than in 2023, and was 41.5% for adults aged ≥70 years, almost 7 percentage points higher than in 2023, though still suboptimal.

Influenza vaccination coverage in adults decreased again in 2024, with the largest decrease in the 50 to <65 years age group, down from 37.4% in 2023 (and 46.8% in 2022) to 33.3% in 2024. Influenza vaccination coverage in adults aged ≥65 years decreased from 64.3% in 2023 (and 70.0% in 2022) to 61.7% in 2024. A nationally representative survey of 2,055 Australian adults conducted in March 2024 found that most (84%) of those aged ≥65 years, and the majority of adults aged 18–64 (53–60%) wanted an influenza vaccine in the upcoming influenza season, suggesting there is a substantial gap between intention and action that practical issues such as inconvenience and cost may contribute to.[34]

As previously recommended,[19] we also calculated adult coverage using a composite measure (a dose of influenza vaccine in the calendar year of interest, an adult dose of 13vPCV and either 1 dose of Zostavax [if received in the past 5 years] or 2 doses of Shingrix given at least 4 weeks apart)[19]to assess overall uptake in the adult immunisation program. Coverage for adults turning 71 years of age using this measure was 27.2% in 2024, up from 25.4% in 2023 and 24.4% in 2022. However, it clearly remains suboptimal.

Nationally, for adults aged 50–64 and ≥65 years, up-to-date coverage for tetanus and diphtheria vaccination (less than 37% for both age groups) and pertussis vaccination (less than 25%) was also suboptimal. True vaccination coverage for these adult vaccines/antigens is likely higher given previously documented under-reporting to the AIR – the AIR only expanded to include adult vaccinations in 2016 and reporting of non-NIP vaccines such as adult tetanus, diphtheria, and pertussis is not currently mandatory.[35-37]

Nationally, 84.7% of adults aged 18–64 years were up-to-date for COVID-19 vaccination (i.e. had previously received a dose of a COVID-19 vaccine), but only 25.6% of adults aged 65–74 years (receipt of a dose in the past 12 months) and 14.4% of adults aged ≥75 years (receipt of a dose in the past 6 months) were up-to-date as per current recommendations.[31]

In 2024, the majority of NIP, influenza and COVID-19 vaccinations in adults aged ≥65 years were administered in GP settings. However, a substantial proportion of adult vaccinations were given in pharmacy settings, more so in the 20–64 years age group and for COVID-19. The role of

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pharmacies in the Australian vaccination landscape has progressively expanded since 2016,[38] with substantial further expansion following commencement of the National Immunisation Program Vaccinations in Pharmacy (NIPVIP) Program on 1 January 2024.[39]

Vaccination coverage in Aboriginal and Torres Strait Islander Peoples

Children

Fully vaccinated coverage for Aboriginal and Torres Strait Islander children decreased between 2023 and 2024 at all three standard age milestones: 12 months (from 89.7% to 89.2%), 24 months (from 87.8% to 86.7%) and 60 months (95% to 94.4%). This follows the 2.0–3.4 percentage point decrease at these three milestones between the 2020 and 2023 reports.[14,23] There is a need for specific studies to investigate the factors contributing to these decreases.

'On-time' vaccination in young Aboriginal and Torres Strait Islander children (where a vaccine is received within 30 days of the recommended age) has not returned to pre-pandemic levels, with on-time coverage for the second dose of diphtheria-tetanus-pertussis (DTPa) and the first dose of measles-mumps-rubella (MMR)-containing vaccine 7.7–12.1 percentage points lower in 2024 than in 2019.

Vaccination coverage in Aboriginal and Torres Strait Islander children was notably lower for vaccines/antigens due 6 months before the standard assessment milestones, compared to those with a longer period between the last dose assessed and the relevant milestone age. For example, coverage of individual vaccines/antigens due at 6 or 12 months of age with no further doses required at 18 months (meningococcal ACWY, polio and hepatitis B) was 95.1% or greater in Aboriginal and Torres Strait Islander children at 24 months in 2024, compared to 88.0–89.5% for vaccines/antigens with a dose due at 18 months of age (varicella, second dose of MMR and fourth dose of DTPa). Coverage of varicella and the second dose of MMR (usually given as the measles-mumps-rubella-varicella [MMRV] combination vaccine at 18 months) was 89.5% at 24 months in Aboriginal and Torres Strait Islander children but 97.9% at 60 months.

Coverage of meningococcal B vaccine, which was introduced onto the NIP for all Aboriginal and Torres Strait Islander children in July 2020, was higher in 2024 than 2023 – 83.0% versus 81.0% for the first dose, 80.9% versus 80.0% for the second dose and 75.0% versus 71.7% for the third dose.[23]

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Influenza vaccination coverage in Aboriginal and Torres Strait Islander children aged 6 months to 4 years was 2.1 percentage points lower in 2024 (21.0%) than in 2023 (23.1%) and 2 percentage points lower in those aged 5 to 9 years (12.6% in 2024 versus 14.6% in 2022). This was despite influenza vaccination being funded under the NIP for all Aboriginal and Torres Strait Islander age groups.

Coverage by 60 months of age for the second dose of hepatitis A vaccine and by 30 months of age for the fourth dose of 13vPCV – both funded under the NIP for Aboriginal and Torres Strait Islander children in four jurisdictions only (South Australia, Northern Territory, Queensland and Western Australia) – was 70.8% for hepatitis A and 78.0% for 13vPCV in December 2024. Improving uptake for both of these additional vaccines is important, but particularly so for the fourth dose of 13vPCV, as invasive pneumococcal disease notification rates are high in Aboriginal and Torres Strait Islander children.[40] In contrast, despite relatively modest hepatitis A vaccine coverage through the targeted NIP program, hepatitis A notification rates have remained low in Aboriginal and Torres Strait Islander people of all ages since 2007.[40]

Adolescents

Coverage of at least one dose of HPV vaccine by the fifteenth birthday was 76.7% in Aboriginal and Torres Strait Islander girls in 2024, 4.2 percentage points lower than in 2023, and 69.2% in boys, 5.8 percentage points lower. Coverage in Aboriginal and Torres Strait Islander girls and boys in 2024 was 11.1 and 13.8 percentage points lower than in 2020, respectively. Given the high rates of cervical cancer in Aboriginal and Torres Strait Islander women,[41] investigation to delineate the factors contributing to these declines in HPV coverage is urgently needed to inform culturally appropriate strategies to increase vaccine uptake and optimise catch-up vaccination, including through settings outside school-based programs.

Patterns of diphtheria-tetanus-pertussis vaccination coverage among Aboriginal and Torres Strait Islander adolescents were broadly similar to HPV vaccination coverage, with 79.3% of girls and 73.0% of boys turning 15 years of age in 2024 having received an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December 2024.

Coverage of an adolescent dose of meningococcal ACWY vaccine in Aboriginal and Torres Strait Islander adolescents turning 16 years in 2024 was 52.7% in girls and 47.1% in boys. While coverage increased with age, the factors contributing to this low coverage should be investigated and addressed given the elevated risk of meningococcal disease in Aboriginal and Torres Strait Islander adolescents.[40]

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Coverage for Aboriginal and Torres Strait Islander adolescents turning 15 years of age using a composite measure comprising at least one dose of HPV vaccine and an adolescent dose of diphtheria-tetanus-pertussis vaccine was 73.4% in 2024, down from 77.9% in 2023 and 80.1% in 2022.[16,23] Coverage for Aboriginal and Torres Strait Islander adolescents turning 18 years of age using a more comprehensive composite measure comprising at least one dose of HPV vaccine, an adolescent dose of diphtheria-tetanus-pertussis vaccine and an adolescent dose of meningococcal ACWY was 61.3% in 2024, down from 63.6% in 2023 and 65.4% in 2022.[16,23]

Adults

Nationally, 34.1% of NIP-eligible Aboriginal and Torres Strait Islander adults aged ≥65 years received at least one dose of Shingrix between 1 November 2023 and 31 December 2024, with 23.2% having received both Shingrix doses in this period. Zoster vaccination coverage, defined as the receipt (before or after inclusion of Shingrix on the NIP) of one dose of Zostavax or two doses of Shingrix given at least 4 weeks apart, was 42.2% for Aboriginal and Torres Strait Islander adults aged ≥65 years in 2024. This coverage is suboptimal, particularly as one in five of these vaccinated adults had only received Zostavax more than 5 years previously, after which time protection wanes significantly. This is despite Aboriginal and Torres Strait Islander people aged over 50 years being eligible for Shingrix vaccination under the NIP. Zoster vaccination coverage in NIP-eligible Aboriginal and Torres Strait Islander adults aged 50–64 years was even lower at only 8.1%.

Coverage of an adult dose of 13vPCV for Aboriginal and Torres Strait Islander adults in 2024 was 48.7% for those turning 71 years of age in 2024, 5.7 percentage points higher than in 2023. It was 47.8% for those aged ≥70 years over the same period, but considerably lower for those aged 50–69 years at 23.2%.

Influenza vaccination coverage in Aboriginal and Torres Strait Islander adults in 2024 was lower than in 2023 for each adult age group, decreasing from 22.3% to 20.6% in the 20 to <50 years age group, 42.2% to 39.0% in the 50 to <65 years age group and 64.1% to 61.9% in the ≥65 years age group. This was despite influenza vaccine being funded on the NIP for all Aboriginal and Torres Strait Islander adults because of the increased risk of severe disease. Appropriate investigations are needed to inform culturally appropriate tailored strategies to improve vaccination coverage.

For Aboriginal and Torres Strait Islander adults aged 50–64 and ≥65 years, ‘up-to-date’ coverage for tetanus and diphtheria vaccination (at less than 42%) and pertussis vaccination (at less than 28%) was also suboptimal, although true coverage is likely higher.[36]

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Nationally, 86.8% of Aboriginal and Torres Strait Islander adults aged 18–64 years were up-to-date for COVID-19 vaccination (i.e. had ever received a dose of COVID-19 vaccine), but only 20.6% of adults aged 65–74 years (had received at least one dose in the past 12 months) and 11.0% of adults aged ≥75 years (had received at least one dose in the past 6 months), i.e. were up-to-date as per current recommendations.[31]

In 2024, the majority of NIP, influenza and COVID-19 vaccinations in Aboriginal and Torres Strait Islander adults aged ≥65 years were administered in GP settings. A substantial percentage of COVID-19 vaccinations were given in pharmacy settings (28.0% in Aboriginal and Torres Strait Islander adults aged 20–64 years and 25.8% in those aged ≥65 years). However, less than 15% of NIP and influenza vaccinations were given in pharmacy settings. The proportion of vaccinations in Aboriginal and Torres Strait Islander adults given in Aboriginal Health settings at national level ranged from 6.3% for COVID-19 in adults aged ≥65 years to 17.4% for NIP vaccines (excluding influenza) in adults aged 20–64 years. However, the proportion was considerably higher in the Northern Territory than other jurisdictions (ranging from 31.2% in adults aged ≥65 years for COVID-19 to 55.7% in adults aged 20–64 years for influenza). Reported percentages for Aboriginal Health settings may also be underestimated because vaccinations given by GPs working in these settings are linked to provider numbers associated with other (mainstream) practices.

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Conclusions

There have been concerning and persistent downward trends in childhood and adolescent vaccination coverage in Australia since 2020. The picture for adult coverage is more mixed, though consistently suboptimal across all vaccines. National surveys of parents of young children and adults have identified a range of access and acceptance barriers likely contributing to observed declines in coverage. However, more research is required to delineate contributory factors, particularly among adolescents and Aboriginal and Torres Strait Islander Peoples, to inform evidence-based and culturally appropriate strategies to increase vaccine uptake and equity of coverage, and optimise catch-up vaccination. The *National Immunisation Strategy for Australia 2025–2030* provides a comprehensive framework to guide implementation of measures to close growing immunity gaps and improve population and individual protection against the wide range of vaccine-preventable diseases.

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Appendix

Table A1. Australian National Immunisation Program Schedule in 2024

Age	Vaccine											
Children												
Birth	Hep B											
2 months	Hep B	DTPa	Hib	Polio					13vPCV	Rotavirus		MenB*
4 months	Hep B	DTPa	Hib	Polio					13vPCV	Rotavirus		MenB*
6 months	Hep B	DTPa	Hib	Polio					13vPCV#			MenB*
12 months					MMR		Men ACWY		13vPCV			MenB*
18 months		DTPa	Hib			MMRV		Hep A‡				
24 months												
48 months		DTPa		Polio				Hep A‡	23vPPV§			
6 months–9 years											Flu†	
Adolescents												
9–14 years									23vPPV§			
12–15 years		dTpa										HPV
14–19 years							Men ACWY					
10–19 years											Flu†	
Adults												
20–49 years											Flu†	
≥50 years						HZ‡‡					Flu†	13vPCV, 23vPPV¶
≥65 years											Flu†	
Pregnant women (any age)		dTpa**									Flu††	
70 years						HZ‡‡						13vPCV§§

Hep B = hepatitis B; DTPa = diphtheria–tetanus–pertussis – paediatric formulation; Hib = *Haemophilus influenzae* type b; IPV = inactivated polio vaccine; 13vPCV = 13-valent pneumococcal conjugate vaccine; Flu = influenza; MMR = measles-mumps-rubella; Men ACWY = meningococcal ACWY conjugate vaccine; MenB = meningococcal B vaccine; MMRV = measles-mumps-rubella-varicella; dTpa = diphtheria–tetanus–pertussis – adolescent/adult formulation; HPV = human papilloma virus; 23vPPV = 23-valent pneumococcal polysaccharide vaccine'; HZ = herpes zoster* Aboriginal and Torres Strait Islander children only (since July 2020) receive a dose of meningococcal B vaccine at 2, 4 and 12 months of age, with an additional dose at 6 months of age for those with specific medical risk conditions

Aboriginal and Torres Strait Islander children living in the Northern Territory, Western Australia, Queensland and South Australia, and children with specified underlying medical conditions that predispose them to invasive pneumococcal disease

† Annual vaccination – all Aboriginal and Torres Strait Islander persons aged over 6 months; non-Indigenous adults aged ≥65 years

‡ Aboriginal and Torres Strait Islander children – doses at 18 months and 4 years of age in the Northern Territory, Western Australia, Queensland and South Australia

§ Medically at-risk children/adolescents and Aboriginal and Torres Strait Islander children living in the Northern Territory, South Australia, Queensland and Western Australia

¶ Aboriginal and Torres Strait Islander adults aged ≥50 years and all adults aged ≥65 years. 13vPCV vaccine replaced 23vPPV vaccine in mid-2020

** During the third trimester of pregnancy

†† At any stage of pregnancy

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‡‡ A single dose of HZ vaccine was funded for adults aged 70 years (with catch-up for 71–79 year olds to 2021) who have not previously received a dose of HZ vaccine. In November 2023, Shingrix replaced Zostavax on the NIP and was funded for adults aged ≥65 years, Aboriginal and Torres Strait Islander people aged ≥50 years and immunocompromised people aged ≥18 years at high risk of herpes zoster infection
§§ A 13vPCV vaccine for non-Indigenous elderly adults from mid-2020

Box 1. Changes in immunisation policy, recommendations and coverage calculation algorithms relevant to interpretation of findings in this report, Australia, 2015–2024[42]

February 2024

* ATAGI recommendations for COVID-19 vaccination in 2024 updated to be a primary 1-dose course for all people aged 18 years with additional doses recommended every 6 months for adults aged ≥75 years and every 12 months for adults aged 65–74 years.

November 2023

* Shingrix replaced Zostavax on the NIP and funded for adults aged ≥65 years, Aboriginal and Torres Strait Islander people aged ≥50 years and immunocompromised people aged ≥18 years at high risk of herpes zoster infection.

July 2023

* Catch-up program of meningococcal B vaccine (Bexsero) available for all Aboriginal and Torres Strait Islander infants under 2 years of age (originally due to end on 30 June 2023).

February 2023

* Funded schedule of 9vHPV, routinely offered to adolescents in Year 7 (around the age of 12−13 years), changed from two doses to a single dose.

* Funded catch-up 9vHPV program extended to young adults up to and including 25 years of age, increasing from 19 years of age.

October 2021

* The Australian Technical Advisory Group on Immunisation recommended first inactivated recombinant zoster vaccine (Shingrix) over first live zoster vaccine (Zostavax) in individuals aged ≥50 years for prevention of herpes zoster and its complications because of the higher efficacy of Shingrix.

February – July 2021

Legislative changes made to the Australian Immunisation Register Act 2015 introducing mandatory reporting to the AIR of COVID-19 vaccines from 21 February, influenza vaccines from 1 March and then all NIP vaccines from 1 July.

July 2020

* A single dose of 13vPCV is recommended and funded for Aboriginal and Torres Strait Islander adults at 50 years of age, followed by a dose of 23vPPV 12 months later and a 2nd dose of 23vPPV 5–10 years after that.

* A single dose of 13vPCV is recommended and funded for non-Indigenous adults at 70 years of age, replacing the previously funded dose of 23vPPV at 65 years of age.

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* Meningococcal B vaccine funded for all Aboriginal and Torres Strait Islander children aged <12 months and individuals of any age with specified high-risk medical conditions. Catch-up is available for all Aboriginal and Torres Strait Islander children aged <2 years (up to 23 months).

* Scheduled ages for funded hepatitis A vaccination (2 doses) for Aboriginal and Torres Strait Islander children in the NT, Qld, SA and WA changed to 18 months and 4 years.

March 2020

* All children aged 6 months to <5 years funded for influenza vaccine under the NIP.

April 2019

* Meningococcal ACWY conjugate vaccine funded under NIP for adolescents aged 14–16 years delivered through school-based vaccination programs and for adolescents aged 15–19 years delivered through primary care providers as part of an on-going catch-up program.

March 2019

* Annual seasonal influenza vaccination funded by the NT for all children aged 6 months to <5 years.

February 2019

* Aboriginal and Torres Strait Islander children and adolescents aged 5–14 years funded for annual seasonal influenza vaccination under the NIP (all Aboriginal and Torres Strait Islander children aged 6 months and older now eligible for a funded annual influenza vaccine).

July 2018

* Schedule for routine childhood vaccination with 13vPCV changed from 2, 4 and 6 months of age to 2, 4 and 12 months of age. Vaccination coverage assessment algorithm for ‘fully vaccinated’ at the 12-month milestone amended to require either 2 or 3 doses of 13vPCV. Vaccination coverage assessment algorithm for ‘fully vaccinated’ at the 24-month milestone amended to require 3 doses of 13vPCV.

* Meningococcal ACWY conjugate vaccine funded for all children at 12 months of age, replacing combined Hib and MenC-containing, with the Hib dose moved to 18 months and given as a monovalent Hib vaccine.

May 2018

* Annual seasonal influenza vaccination funded by the ACT, NSW, Qld, SA, Tas and Victoria for all children aged 6 months to <5 years.

February 2018

* A 2-dose schedule of 9vHPV vaccine recommended and funded under the NIP for female and male adolescents aged 12–14 years, delivered through school-based vaccination programs (changed from a 3-dose schedule of 4vHPV vaccine in place since 2007 for females and 2013 for males).

July 2017

* Qld, SA, Vic and WA changed from a 3-dose RotaTeq rotavirus schedule to a 2-dose Rotarix schedule, consistent with the ACT, NSW, Vic and the NT.

* Coverage for the second dose on MMR-containing vaccine no longer assessed at 60 months of age.

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* All individuals aged 10–19 years and refugees and humanitarian entrants aged ≥20 years eligible to receive free catch-up vaccinations through an expansion to the NIP.

December 2016

* Vaccination coverage assessment algorithm for 'fully vaccinated' at the 24-month milestone amended to require 4 doses of DTP-containing vaccine.

November 2016

* National herpes zoster (HZ) vaccination program commenced with a single dose of HZ vaccine at 70 years of age with a catch-up program for people aged 71-79 years.

March 2016

* Booster dose of DTP vaccine funded at 18 months of age.

January 2016

* New immunisation requirements for federal government family assistance payments ('No Jab, No Pay') came into effect. Only parents of children (aged <20 years, up from <7 years previously) who are 'fully vaccinated' or on a recognised catch-up schedule are eligible to receive the Child Care Benefit, Child Care Rebate and/or the Family Tax Benefit Part A end-of-year supplement. Children with medical contraindications or natural immunity for certain diseases continue to be exempt from the requirements; however, objection on non-medical grounds is no longer a valid exemption.

March 2015

* Annual seasonal influenza vaccination funded under the NIP for Aboriginal and Torres Strait Islander children aged 6 months to <5 years.

Detailed methods

The Australian Immunisation Register

The Australian Childhood Immunisation Register (ACIR) was established on 1 January 1996 by transferring demographic data from Medicare on all enrolled children aged <7 years.[43] On 30 September 2016, the ACIR expanded to become the Australian Immunisation Register (AIR), which collects data on all vaccinations given from birth to death.[44] All people registered with Medicare are assigned a unique number that then travels with that person for life, across all relevant Medicare card numbers (e.g. where there are multiple cards due to family circumstances or maturity). Participation in the AIR is 'opt-out', and so the AIR constitutes a nearly complete population register for Australian residents.[43] Individuals who are not Medicare-registered but for whom a vaccination encounter is reported to the AIR are assigned a temporary number,[45] with subsequent assignment of a unique number if the individual is identified to be Medicare-registered. Since 2001, vaccinations given overseas can be recorded if an Australia-based provider endorses

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their validity. Data are transferred to the AIR when a recognised Australia-based immunisation provider supplies details of an eligible vaccination. This occurs predominantly via practice management software or direct data entry on the AIR Site. A person remains active on the AIR until Medicare is notified that they have either died or permanently left Australia, after which an 'end date' is applied to their AIR record. All vaccination encounter records for a person remain on the register indefinitely. Mandatory reporting to the AIR was introduced from 1 July 2021 for all vaccines given to people of any age under the NIP, as well as earlier for COVID-19 vaccines (from 20 February 2021) and influenza vaccines (from 1 March 2021).[35]

Data source

The AIR contains limited information for each individual (unique identifier, date of birth, gender, Aboriginal and Torres Strait Islander status, postcode) and regarding vaccinations received (brand/type, dose number, encounter date, immunisation provider). There are no ethnicity, country of birth, occupation, residential aged care nor disability fields on AIR and very limited/incomplete information on medical risk conditions (which define key target groups under the NIP). This limits the scope of vaccination coverage analyses and research which can be undertaken using AIR data. However, the ability to use the postcode field on AIR to connect AIR data to other sources of available geographic/demographic data somewhat mitigates the lack of socio-demographic information on the AIR.

Individuals with a temporary unique identifier number (i.e. not Medicare-registered) are excluded from all coverage analyses in this report, along with those whose records have an 'end date'. Prior to analysis, NCIRS removes duplicate AIR person records (i.e. where the unique identifier number is identical), retaining only the most up-to-date record based on Medicare registration date, as well as duplicate vaccination records (i.e. where the unique identifier number, vaccine type, vaccine dose and encounter date are identical). To allow for known data entry errors at the time of reporting to AIR, NCIRS uses statistical programs to calculate coverage for particular vaccines that look for vaccine dose numbers greater than the nominal last dose (e.g. for second MMR dose coverage, the programs look for doses 2, 3 or 4 of MMR).

Remoteness status

Areas of residence were defined as 'Major cities', 'Inner regional', 'Outer regional', 'Remote' and 'Very remote' using the Accessibility/Remoteness Index of Australia (ARIA+).[46] ARIA++ is a continuous varying index with values ranging from 0 (high accessibility) to 15 (high remoteness) and is based on road distance measurements from over 12,000 populated localities to the nearest service centres in five categories based on population size. For analyses in this report, the two

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‘Regional’ categories (‘Inner regional’ and ‘Outer regional’) were combined, as were the two ‘Remote’ categories (‘Remote’ and ‘Very remote’). ARIA++ Accessibility/Remoteness categories were assigned to each person using their recorded postcode of residence on the AIR.

Socio-economic status

Vaccination coverage and timeliness were assessed by area level socio-economic status using the Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA) – Index of Economic Resources.[47] The SEIFA index category was assigned for each individual using their recorded postcode of residence on the AIR. For this report, vaccination coverage for people living in postcodes classified as being in the top quintile of all postcodes with regard to economic resources with vaccination coverage for people living in postcodes classified as being in the bottom quintile of postcodes with regard to economic resources.

Small area analysis

SA3

Analysis of coverage was undertaken at the small area level using the Australian Bureau of Statistics-defined SA3,[48] which was chosen because each SA3 is small enough to show differences within jurisdictions but not so small as to render maps unreadable. For reasons of both confidentiality and precision of coverage estimates, SA3s with denominators of less than 26 children were not included in any small area coverage analysis. Maps were created using version 15 of the MapInfo mapping software[49] and the Australian Bureau of Statistics Census Boundary Information. As postcode is the only geographical data field available on the AIR, the Australian Bureau of Statistics Postcode to SA3 Concordance 2021 file was used to match residential postcodes on AIR to SA3s.[50]

PHN

Analysis of coverage was also undertaken at the Primary Health Network (PHN) level. PHNs are organisations that work to improve coordination of healthcare in their area. There are 31 PHNs in Australia.

Aboriginal and Torres Strait Islander status

Aboriginal and Torres Strait Islander status on the AIR is recorded as ‘Indigenous’, ‘non-Indigenous’ or ‘unknown’. The AIR uses two sources to obtain and report on an individual’s Aboriginal and Torres Strait Islander status. Initially, the status is sourced from what has been reported to Medicare. However, if a person informs their vaccination provider that they identify (or

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do not identify) as Aboriginal and/or Torres Strait Islander, then the vaccination provider can record that status through direct data entry on the AIR via the AIR Site. This is the Aboriginal and Torres Strait Islander status information on the AIR that NCIRS receives via their downloaded data from the Services Australia data portal. However, this provider-recorded Aboriginal and Torres Strait Islander status information does not update/change the Aboriginal and Torres Strait Islander status information recorded on Medicare. Further, if a vaccination provider changes the Aboriginal and Torres Strait Islander status of a person within their practice management software, this does not get updated on AIR. For this report, individuals whose Aboriginal and Torres Strait Islander status was not specified (0.3% of persons on the AIR, as at 2 February 2025) were classified as non-Indigenous for the purposes of analysis. While Aboriginal and Torres Strait Islander status is available in AIR, other demographic parameters such as country of birth and ethnicity are not, nor medical conditions.

Vaccination coverage – children

This report predominantly uses AIR data as at 2 February 2025. The cohort method has been used for calculating immunisation coverage at the population level (national and state/territory and other small areas) since the inception of the ACIR.[51] Vaccine/antigen doses included in the algorithms to assess whether a child is fully vaccinated are set by the Australian Government Department of Health, Disability and Ageing ('the Department'). The standard methodology used by Services Australia/the Department and NCIRS assesses coverage at 6–18 months after vaccines are due, to allow time for delayed vaccination. Cohort vaccination status is assessed at 12 months of age (for vaccines due at 4 and 6 months), 24 months of age (for vaccines due at 6, 12 and 18 months) and 60 months of age (for vaccines due at 48 months). Only vaccines given on or before a child's first, second or fifth birthday, respectively, are included in coverage calculations.[51] If a child's records indicate receipt of the last dose of a vaccine that required more than one dose to complete the series, it is assumed that earlier vaccines in the sequence were given.

For most analyses in this report, 12-month-wide cohorts were used; specifically, children born between 1 January 2023 and 31 December 2023 for the 12-month milestone, between 1 January 2022 and 31 December 2022 for the 24-month milestone, and between 1 January 2019 and 31 December 2019 for the 60-month milestone. However, to assess fully vaccinated trends over time, three-month-wide birth cohorts were used, with children aged 12 to <15 months for the 12-month assessment age, children aged 24 to <27 months for the 24--month assessment age and children aged 60 to <63 months for the 60-month assessment age.

The proportion of children fully vaccinated was calculated using the number of Medicare-registered children fully vaccinated with the vaccines of interest by the designated age as the numerator and

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the total number of Medicare-registered children in the relevant age cohort as the denominator. Definitions of fully vaccinated coverage are provided in Table A2 in the Appendix; definitions for the 12-, 24- and 60-month milestones have been developed by the Department for the purpose of standardised reporting. However, vaccination coverage estimates in this report may differ from estimates published elsewhere using different methods, for example calculation using rolling annualised quarterly coverage data.

Vaccination coverage was also calculated for individual NIP vaccines/antigens, including those given in early childhood but not routinely reported on and not part of fully vaccinated calculations at 12, 24 and 60 months of age. This additional coverage assessment included the second dose of rotavirus vaccine by 12 months of age, the first dose of hepatitis A vaccine in Aboriginal and Torres Strait Islander children by 30 months of age and the fourth dose of 13vPCV in Aboriginal and Torres Strait Islander children by 30 months of age. Coverage of doses 1–3 of meningococcal B vaccine by 24 months of age, as well as course completion (defined as receipt of three doses if the first meningococcal B vaccine dose was received prior to 1 year of age or receipt of two doses if the first dose was received after having turned 1 year of age) was assessed for the cohort of Aboriginal and Torres Strait Islander children born in 2022. The proportion of children vaccinated with the relevant vaccine/antigen dose was calculated using the number of Medicare-registered children vaccinated with the relevant vaccine/antigen dose by the designated age as the numerator and the total number of Medicare-registered children in the relevant age cohort as the denominator.

Influenza vaccination coverage for children aged 6 months to <5 years and 5 to <10 years was calculated using the number of children in the relevant age group with at least one dose of influenza vaccine recorded on the AIR in the calendar year of interest (i.e. 2024 or 2023) as the numerator and the total number of children registered on the AIR in each relevant age group as the denominator. Vaccination numerators were based on age at vaccination, and age group denominators were based on age at 30 June in the year of interest. Analyses were undertaken by age group, jurisdiction and year.

Similar analyses to those outlined above were also undertaken separately for coverage in Aboriginal and Torres Strait Islander children.

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Table A2. Vaccinations required to be deemed fully vaccinated by each assessment milestone, 2024

Milestone	Vaccinations
9 months/12 months (Cohort born 1 January 2023–31 December 2023)	Dose 3 DTPa (due at 6 months) Dose 3 polio (due at 6 months) Dose 3 HepB (due at 6 months) Dose 3 Hib (due at 6 months)* Dose 2 or 3 13vPCV (due at 4 or 6 months)
15 months (Cohort born 1 January 2022–31 December 2022)	Dose 3 DTPa (due at 6 months) Dose 3 polio (due at 6 months) Dose 3 HepB (due at 6 months) Dose 3 Hib (due at 6 months)* Dose 3 or 4 13vPCV (due at 6 or 12 months) Dose 1 meningococcal C-containing vaccine (due at 12 months) Dose 1 MMR (due at 12 months)
21 months/24 months (Cohort born 1 January 2022–31 December 2022)	Dose 4 DTPa (due at 18 months) Dose 3 polio (due at 6 months) Dose 3 HepB (due at 6 months) Dose 4 Hib (due at 18 months)* Dose 1 meningococcal C-containing vaccine (due at 12 months) Dose 1 varicella (due at 18 months) Dose 2 MMR (due at 18 months) Dose 3 or 4 13vPCV (due at 6 or 12 months)
51 months/60 months (Cohort born 1 January 2019–31 December 2019)	Dose 4 or 5 DTPa (due at 48 months) Dose 4 polio (due at 48 months)

* Children who had Comvax, Generic HIB and/or PedvaxHIB recorded on the AIR only require dose 2 Hib to be deemed fully vaccinated by 12 months and dose 3 or 4 to be deemed fully vaccinated by 24 months. Children who had ActHIB, Hexaxim, Hiberix, HibTITER, Infanrix Hexa, Menitorix, Pediacel, ProHIBit and Poliacel recorded on the AIR only require dose 3 if it was given at over 15 months of age to be deemed fully vaccinated by 24 months

DTPa = diphtheria-tetanus-pertussis paediatric formulation; Hep B = hepatitis B; Hib = *Haemophilus influenzae* type b; 13vPCV = 13-valent pneumococcal conjugate vaccine; MMR = measles-mumps-rubella

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On-time vaccination coverage

On-time vaccination was defined as receipt of the scheduled vaccine dose within 30 days of the recommended age. Specifically, children who received the second dose of DTPa-containing vaccine (due at 4 months of age under the NIP) before they were more than 5 months of age were classified as on time for that dose, and children who received the first dose of MMR-containing vaccine (due at 12 months of age under the NIP) before they were more than 13 months of age were classified as on-time for that dose. On-time vaccination was measured in three-month-wide birth cohorts, defined by the quarter and year in which the children in each cohort were due to receive the vaccine dose being assessed. The proportion of each cohort vaccinated on time was calculated using the number of Medicare-registered children vaccinated within 30 days of the recommended age of the vaccine of interest as the numerator and the total number of Medicare-registered children in the relevant cohort as the denominator. This is a more timely way to assess on-time vaccination (as children due for the relevant vaccines in 2024 were included in the analysis) and differs to how timeliness of vaccination has been calculated in previous reports prior to the 2022 report, where the denominator was the number of Medicare-registered children in the relevant cohort who had ever received the vaccine of interest and required assessment of timeliness at up to 3 years after doses were due, to allow time for very late vaccinations to be included in the analysis. Similar analyses to those outlined above were also undertaken separately for on-time coverage in Aboriginal and Torres Strait Islander children.

To capture other aspects of timeliness, fully vaccinated coverage was also assessed at 3 months after last vaccine dose due – that is, earlier than the standard assessment milestones, at 9, 15, 21 and 51 months of age – for all children and Aboriginal and Torres Strait Islander children, and by PHN and jurisdiction. The definitions of fully vaccinated coverage used are provided in Table A2 in the Appendix.

Vaccination coverage – adolescents

The WHO recommends assessing HPV vaccination coverage by 15 years of age for the purpose of comparison internationally and over time. In the cohorts of Medicare-registered adolescents turning 15 years of age during 2024 or 2023 (i.e. cohorts born in 2008 or 2008, respectively), the proportion who had received at least one dose of HPV vaccine after their ninth birthday (as HPV vaccine is registered from 9 years of age) but before their fifteenth birthday was calculated. Analysis of HPV vaccination coverage by 15 years of age was undertaken for all adolescents and Aboriginal and Torres Strait Islander adolescents by year, gender, jurisdiction, and socio-economic status and remoteness category of area of residence. However, adolescent vaccination coverage

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estimates in this report may differ from estimates published elsewhere using different methods, for example calculation using rolling annualised quarterly coverage data.

Vaccination coverage of individual adolescent vaccines – namely, at least one dose of HPV vaccine given at ≥9 years of age, a dose of diphtheria-tetanus-pertussis vaccine (recorded on the AIR as either dTpa or DTPa) given at ≥10 years of age and a dose of meningococcal ACWY vaccine given at ≥10 years of age – were also calculated using single year-wide birth cohorts of Medicare-registered individuals, with reference to the age the cohorts were turning in 2024. These vaccines are predominantly given under the NIP as part of state/territory school-based vaccination programs – HPV and dTpa vaccines are provided to students in Year 7 (typically around the age of 12–13 years) and meningococcal ACWY vaccine is provided to students in Year 10 (typically around the age of 15–16 years). However, adolescents who miss or opt out of receiving these vaccines at school can be vaccinated by other providers, with dTpa and meningococcal vaccine funded up to 19 years of age and HPV vaccine funded up to 25 years of age. Coverage was therefore assessed in single year-wide cohorts turning 13–25 years of age (for HPV vaccine), 13–19 years of age (for adolescent dose of diphtheria-tetanus-pertussis vaccine) and 15–19 years of age (for adolescent dose of meningococcal ACWY vaccine). Analysis for each vaccine was undertaken by gender, birth cohort/age and jurisdiction for all adolescents and Aboriginal and Torres Strait Islander adolescents.

To assess full coverage of the adolescent vaccinations funded under the NIP, two adolescent composite measures of vaccination coverage were calculated, as previously recommended.[19] One composite measure – receipt of both an HPV vaccine dose and an adolescent dose of diphtheria-tetanus-pertussis vaccine by 31 December of the relevant year – was assessed in the cohort of Medicare-registered adolescents turning 15 years of age in 2024 (versus 2023 and 2022). Another composite measure – receipt of an HPV vaccine dose and adolescent doses of diphtheria-tetanus-pertussis and meningococcal ACWY vaccine by 31 December of the relevant year – was assessed in the cohort of Medicare-registered adolescents turning 18 years of age in 2024 (versus 2023 and 2022). Analysis of both adolescent composite measures was undertaken by jurisdiction for all adolescents and Aboriginal and Torres Strait Islander adolescents.

Influenza vaccination coverage for adolescents aged 10 to <20 years was calculated using the number of Medicare-registered adolescents in the relevant age group with at least one dose of influenza vaccine recorded on the AIR in the calendar year of interest (i.e. 2024 or 2023) as the numerator and the total number of adolescents registered on the AIR in each relevant age group as the denominator. Vaccination numerators were based on age at vaccination, and age group denominators were based on age at 30 June in the year of interest. Analyses were undertaken by

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age group, jurisdiction and year for all adolescents and Aboriginal and Torres Strait Islander adolescents.

Vaccination coverage – adults

Following the introduction of Shingrix vaccine onto the NIP from 1 November 2023, Shingrix uptake was assessed for NIP-eligible adults aged ≥65 years and Aboriginal and Torres Strait Islander adults aged ≥50 years for). Although younger immunocompromised adults are also eligible for Shingrix under the NIP from 18 years of age, Shingrix uptake in this population was not able to be assessed as the AIR does not contain information on immunocompromise. Adults with a prior dose of Zostavax recorded on the AIR were only included in the NIP-eligible population denominator if Zostavax was given at age 70–79 years more than 5 years ago, or if Zostavax was given at age <70 years or ≥80 years more than 12 months ago. Adults aged ≥65 years (≥50 years for Aboriginal and Torres Strait Islander adults) with an AIR record of a first dose of Shingrix received prior to it becoming available on the NIP (Shingrix had been available on private prescription since June 2021) were also included in the NIP-eligible population. However, adults aged ≥65 years (≥50 years for Aboriginal and Torres Strait Islander adults) with an AIR record of two doses of Shingrix, with interval of at least 4 weeks between doses, received before 1 November 2023 were excluded from the NIP-eligible population. Uptake of Shingrix vaccine was calculated as a proportion i.e. the number of NIP-eligible adults who received at least one dose of Shingrix vaccine between 1 November 2023 and 31 December 2024 divided by the number of NIP-eligible adults based on age at 31 December 2024. Receipt of Shingrix vaccine was categorised as: a) 'Dose 1 pre-NIP + Dose 2 post-NIP' (i.e. receipt of one dose of Shingrix before its inclusion on the NIP and another dose after its inclusion on the NIP with interval of at least 4 weeks between doses); b) 'Dose 1 only post-NIP' (i.e. receipt of only one dose of Shingrix, or two doses less than 4 weeks apart, after its inclusion on the NIP, where Dose 1 not received pre-NIP); and c) 'Dose 1 + Dose 2 post-NIP' (i.e. receipt of two doses of Shingrix, at least 4 weeks apart, after its inclusion on the NIP, where Dose 1 not received pre-NIP). Uptake was calculated for all adults aged ≥65 years and for Aboriginal and Torres Strait Islander adults aged 50–64 years and ≥65 years, nationally and by jurisdiction.

Adult zoster vaccination coverage calculated in this report differs to previous reports in which coverage was calculated for adults turning 71 years of age, as well as for the entire cohort turning ≥70 years of age in the year of interest, due to the NIP changing from a funded single dose of Zostavax at 70 years of age to two funded doses of Shingrix for all adults ≥65 years of age, Aboriginal and Torres Strait Islander adults aged ≥50 years and immunocompromised people aged ≥18 years with specified medical conditions. In this report, adult zoster vaccination coverage was calculated using the cohort method for all Medicare-registered adults turning ≥65 years of age in

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2024, and for all Medicare-registered Aboriginal and Torres Strait Islander adults turning 50–64, ≥65 and ≥50 years of age. As the AIR does not contain information on immunocompromise, coverage was not able to be calculated for the population of immunocompromised people aged ≥18 years. Overall zoster vaccination coverage was defined as receipt (before or after inclusion of Shingrix on the NIP) of one dose of Zostavax or two doses of Shingrix (given at least four weeks apart) by 31 December 2024. The proportion of overall zoster vaccination coverage by vaccine brand was calculated and categorised as a) receipt of two doses of Shingrix given at least 4 weeks apart, irrespective of whether Zostavax had been received previously; b) receipt of at least one dose of Zostavax less than 5 years previously (i.e. received between 1 January 2020 – 31 December 2024), where two doses of Shingrix at least 4 weeks apart had not been received; and c) receipt of at least one dose of Zostavax 5 or more years previously (i.e. received on/prior to 31 December 2019), where two doses of Shingrix at least 4 weeks apart had not been received. Overall zoster vaccination coverage, and coverage by brand were assessed nationally and by jurisdiction for each cohort. To estimate partial vaccination coverage, the proportion of each cohort who had no prior history of zoster vaccination and received one dose of Shingrix (or two doses less than 4 weeks apart) by 31 December 2024 was also calculated.

Adult 13vPCV vaccination coverage was calculated using the cohort method for Medicare-registered adults turning 71 years of age during 2024, 2023, 2022, 2021 or 2020 (i.e. cohorts born in 1953, 1952, 1951, 1950 or 1949, respectively). The proportion of these cohorts that had received an adult dose of 13vPCV by 31 December of the relevant year was calculated. Adult 13vPCV vaccination coverage was also calculated for all Medicare-registered adults turning ≥70 years of age in 2024, and for all Medicare-registered Aboriginal and Torres Strait Islander adults turning 50–69, ≥70 and ≥50 years of age. 13vPCV vaccination coverage was assessed nationally and by jurisdiction for each cohort.

Influenza vaccination coverage for adults aged 20 to <50 years, 50 to <65 years and ≥65 years was calculated using the number of Medicare-registered adults in the relevant age group with at least one dose of influenza vaccine recorded on the AIR in the calendar year of interest (i.e. 2024 or 2023) as the numerator and the total number of adults registered on the AIR in each relevant age group as the denominator. Vaccination numerators were based on age at vaccination, and age group denominators were based on age at 30 June in the year of interest. Analyses were undertaken by age group, jurisdiction and year for all adults and Aboriginal and Torres Strait Islander adults.

An adult composite measure of vaccination coverage, defined as receipt of an influenza vaccine dose in 2024, a 13vPCV dose and either 1 dose of Zostavax (if Zostavax received within the previous 5 years, given the evidence that protection using Zostavax wanes significantly from

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around 5 years after vaccination) or 2 doses of Shingrix vaccine (given at least 4 weeks apart) by the end 2024, was assessed in the cohort of Medicare-registered adults turning 71 years of age in 2024. The composite measure was assessed nationally and by jurisdiction for all adults and Aboriginal and Torres Strait Islander adults.

Adult up-to-date diphtheria, tetanus and pertussis vaccination coverage was assessed among Medicare-registered older adults by age group (50–64 years and ≥65 years). In line with Australian Immunisation Handbook (AIH) recommendations, people ≥50 years were deemed up to date for tetanus and diphtheria vaccination if they had received a tetanus or diphtheria-containing vaccine after the age of 40 years, and up to date for pertussis vaccination if they had received a pertussis-containing vaccine after the age of 40 years (for those aged 50–64 years) or 55 years (for those aged ≥65 years). The proportion of adults up to date for tetanus, pertussis, and diphtheria vaccination was calculated from the number vaccinated by 31 December 2024 and the total number of adults in the relevant age group, based on age at 31 December 2024. Up-to-date coverage was assessed nationally and by jurisdiction for all adults and Aboriginal and Torres Strait Islander adults. As the AIR only expanded to include adult vaccinations in 2016, and the reporting of adult tetanus, diphtheria, and pertussis vaccinations to the AIR is not currently mandatory, it is likely that the vaccination coverage of up-to-date tetanus, pertussis, and diphtheria calculated are under-estimated.

Adult up-to-date COVID-19 vaccination was assessed among Medicare-registered older adults by age group (18–64 years, 65–74 years and ≥75 years). In line with the AIH recommendations for COVID-19 vaccination during 2024, adults were deemed up to date for COVID-19 vaccination if they were: a) aged 18–64 years and had ever received at least one dose of a COVID-19 vaccine by 31 December 2024; b) aged 65–74 years and had received at least one dose in 2024 (i.e. within the previous 12 months); and c) aged ≥75 years and had received at least one dose between 1 July and 31 December 2024 (i.e. within the previous 6 months). The proportion of adults up to date for COVID-19 vaccination was calculated from the number vaccinated by 31 December 2024 and the total number of adults in the relevant age group, based on age at 31 December 2024. Up-to-date coverage was assessed nationally and by jurisdiction for all adults and Aboriginal and Torres Strait Islander adults. The COVID-19 vaccination data included in this report was calculated using AIR data for both the numerator and denominator and therefore differs from COVID-19 vaccination data available elsewhere.[20]

Provider setting

The proportion of vaccinations (COVID-19, influenza, other NIP vaccines) given to Medicare-registered adults aged 20-64 years and ≥65 years and recorded on AIR as administered in 2024

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was calculated by provider setting and by jurisdiction for all adults and Aboriginal and Torres Strait Islander adults.

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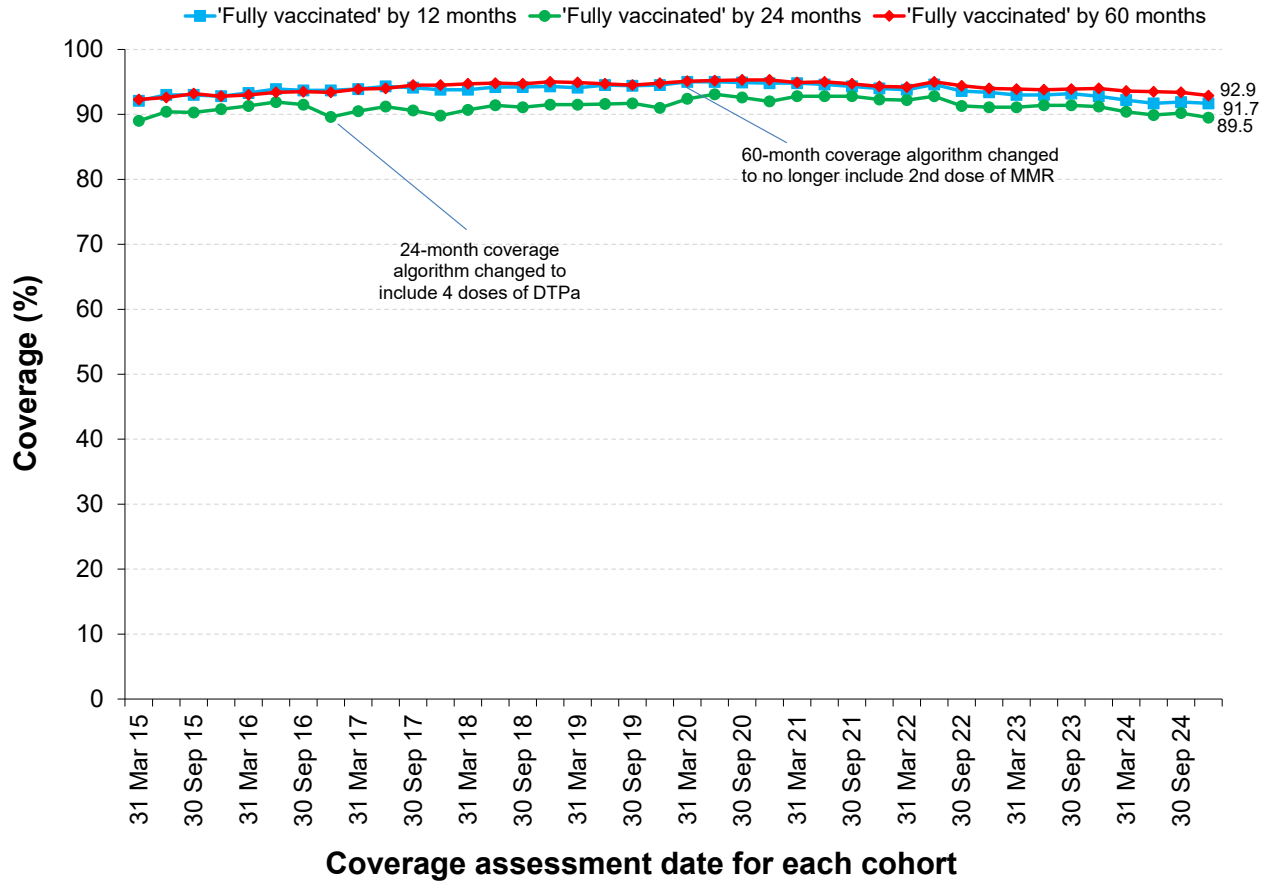
Additional data

Figure A1. Trends in fully vaccinated coverage by quarter, Australia, 2015–2024



Note: By three-month birth cohorts born between 1 January 2010 and 31 December 2023. Coverage assessment date was 12, 24 or 60 months after the last birthdate of each cohort. Vaccination coverage estimates are calculated by quarter and may differ from estimates published elsewhere using rolling annualised data
MMR2 = Second dose of MMR vaccine; MenC = meningococcal C-containing; DTPa = diphtheria-tetanus-pertussis

Source: Australian Immunisation Register

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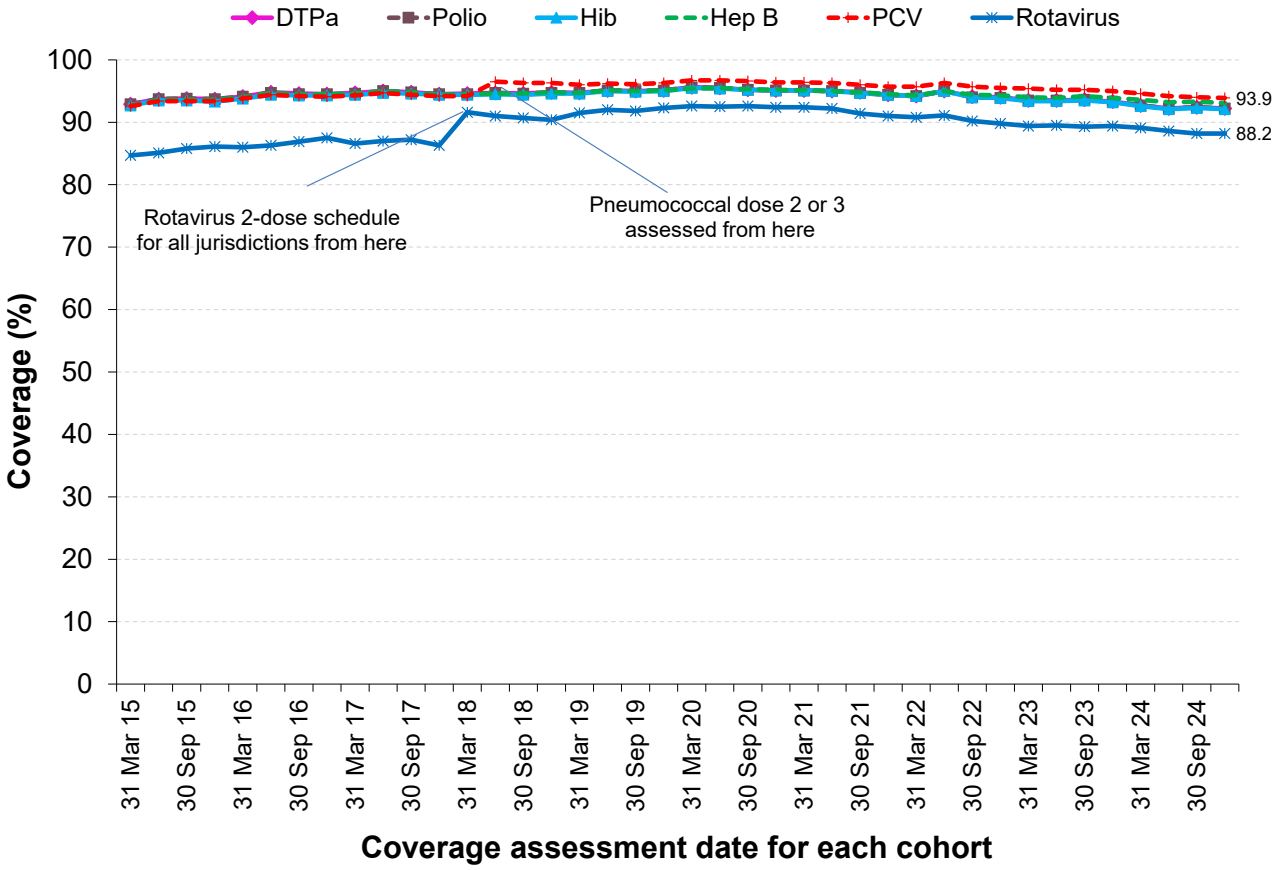
Figure A2. Trends in vaccination coverage at 12 months of age, by vaccine/antigen* and quarter, Australia, 2015–2024



Note: By three-month birth cohorts born between 1 January 2014 and 31 December 2023. Coverage assessment date was 12 months after the last birth date of each cohort. Vaccination coverage estimates are calculated by quarter and may differ from estimates published elsewhere using rolling annualised data

* Third dose of DTPa vaccine, polio vaccine and hepatitis B vaccine, second or third dose of 13vPCV and Hib vaccines and second dose of rotavirus vaccine (vaccines included in the 12-month definition of fully vaccinated coverage + rotavirus vaccine)

DTPa = diphtheria-tetanus-pertussis; Hib = *Haemophilus influenzae* type b; Hep B = hepatitis B; 13vPCV = pneumococcal conjugate vaccine

Source: Australian Immunisation Register

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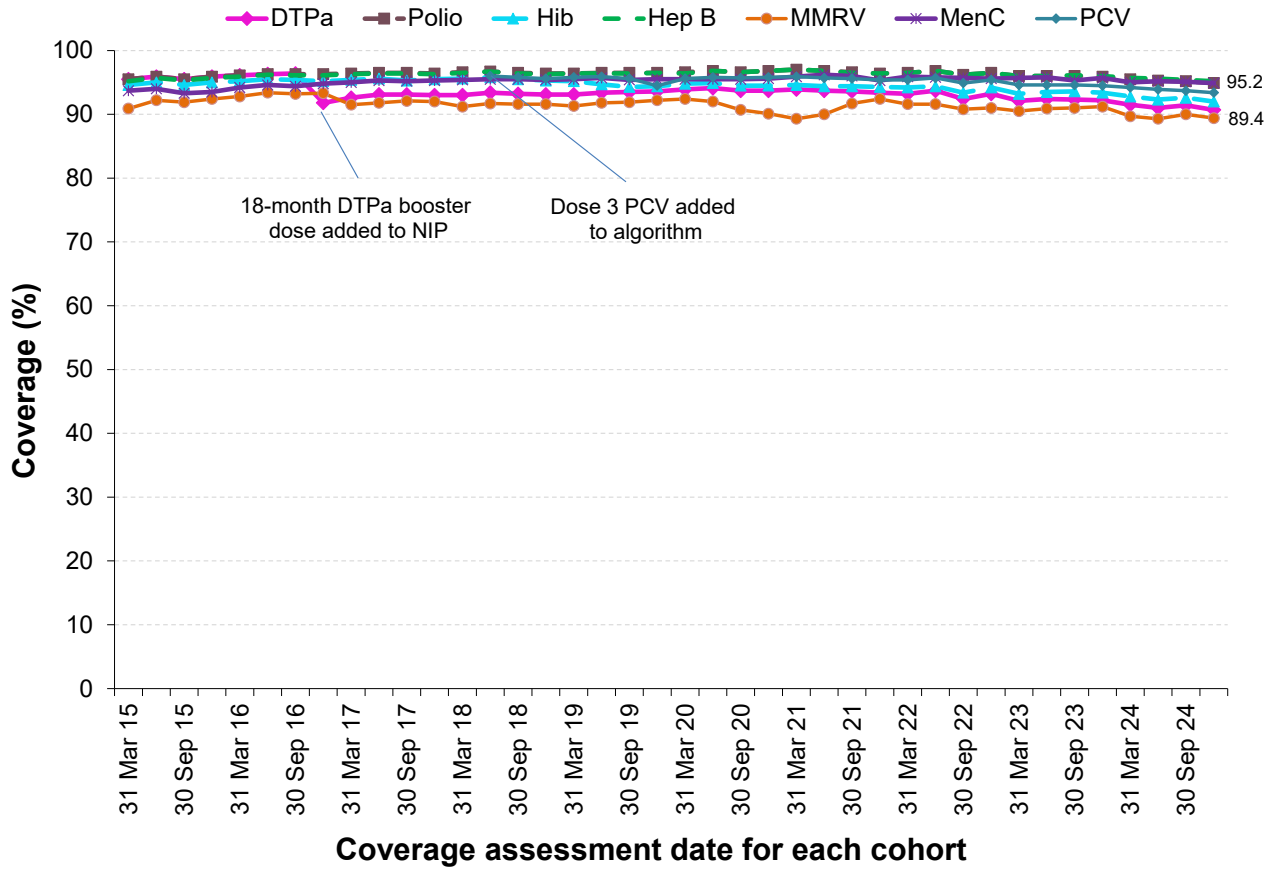
Figure A3. Trends in vaccination coverage at 24 months of age, by vaccine/antigen* and quarter, Australia, 2015–2024



Note: By three-month birth cohorts born between 1 January 2013 and 31 December 2022. Coverage assessment date was 24 months after the last birth date of each cohort. Vaccination coverage estimates are calculated by quarter and may differ from estimates published elsewhere using rolling annualised data

* Fourth dose of DTPa, third dose of polio, third or fourth dose of Hib, third dose of hepatitis B, dose 2 of MMRV, first dose of MenC, and third or fourth dose of 13vPCV (vaccines included in the 24-month definition of fully vaccinated coverage)

DTPa = diphtheria-tetanus-pertussis; Hib = *Haemophilus influenzae* type b; Hep B = hepatitis B; MMR = measles-mumps-rubella; MenC = meningococcal C-containing; MMRV = measles-mumps-rubella-varicella; 13vPCV = pneumococcal conjugate vaccine

Source: Australian Immunisation Register

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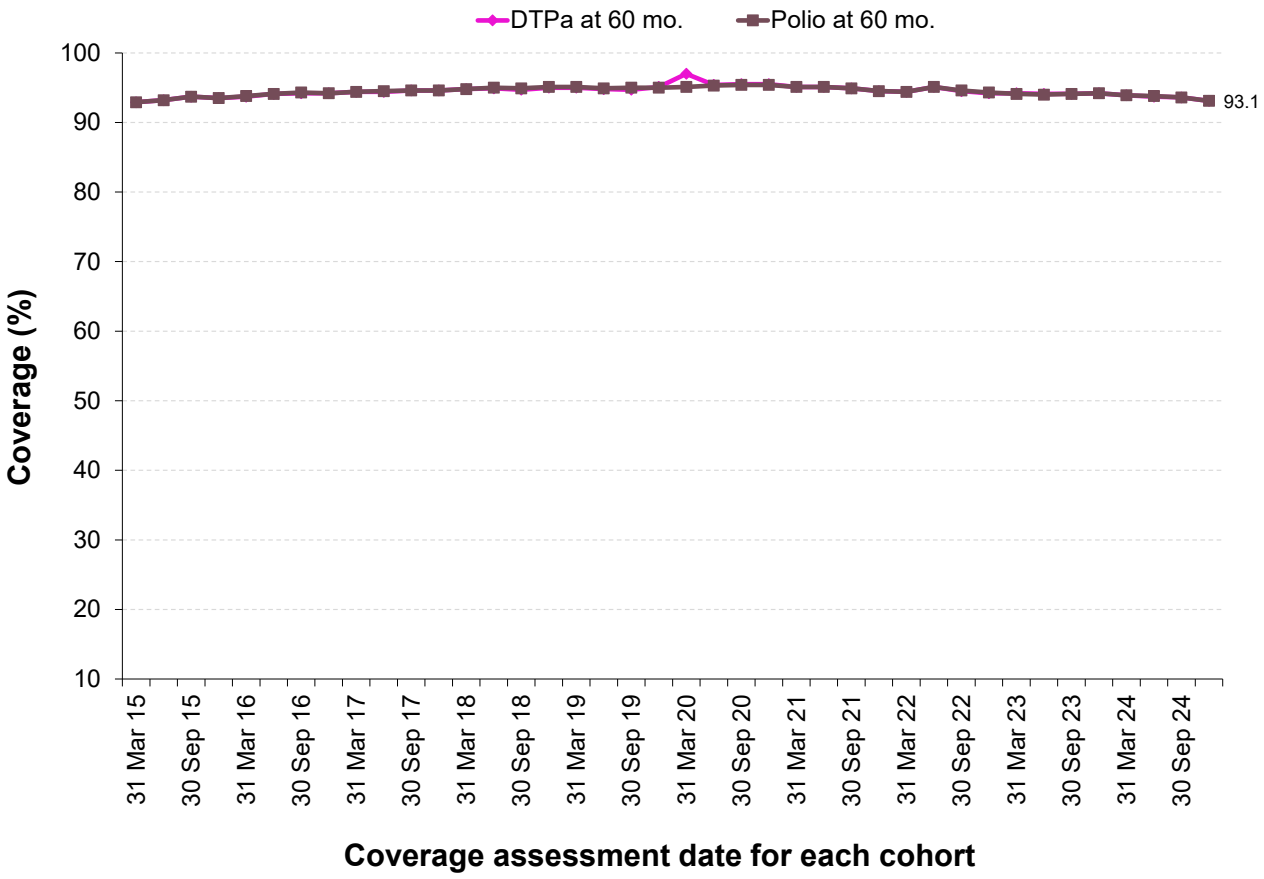
Figure A4. Trends in vaccination coverage at 60 months of age, by vaccine/antigen* and quarter, Australia, 2014–2023



Note: By three-month birth cohorts born between 1 January 2010 and 31 December 2019. Coverage assessment date was 60 months after the last birth date of each cohort. Vaccination coverage estimates are calculated by quarter and may differ from estimates published elsewhere using rolling annualised data

* Fourth or fifth dose of DTPa and fourth dose of polio

DTPa = Diphtheria-tetanus-pertussis; MMR = Measles-mumps-rubella (vaccines included in the 60-month definition of fully vaccinated coverage)

Source: Australian Immunisation Register

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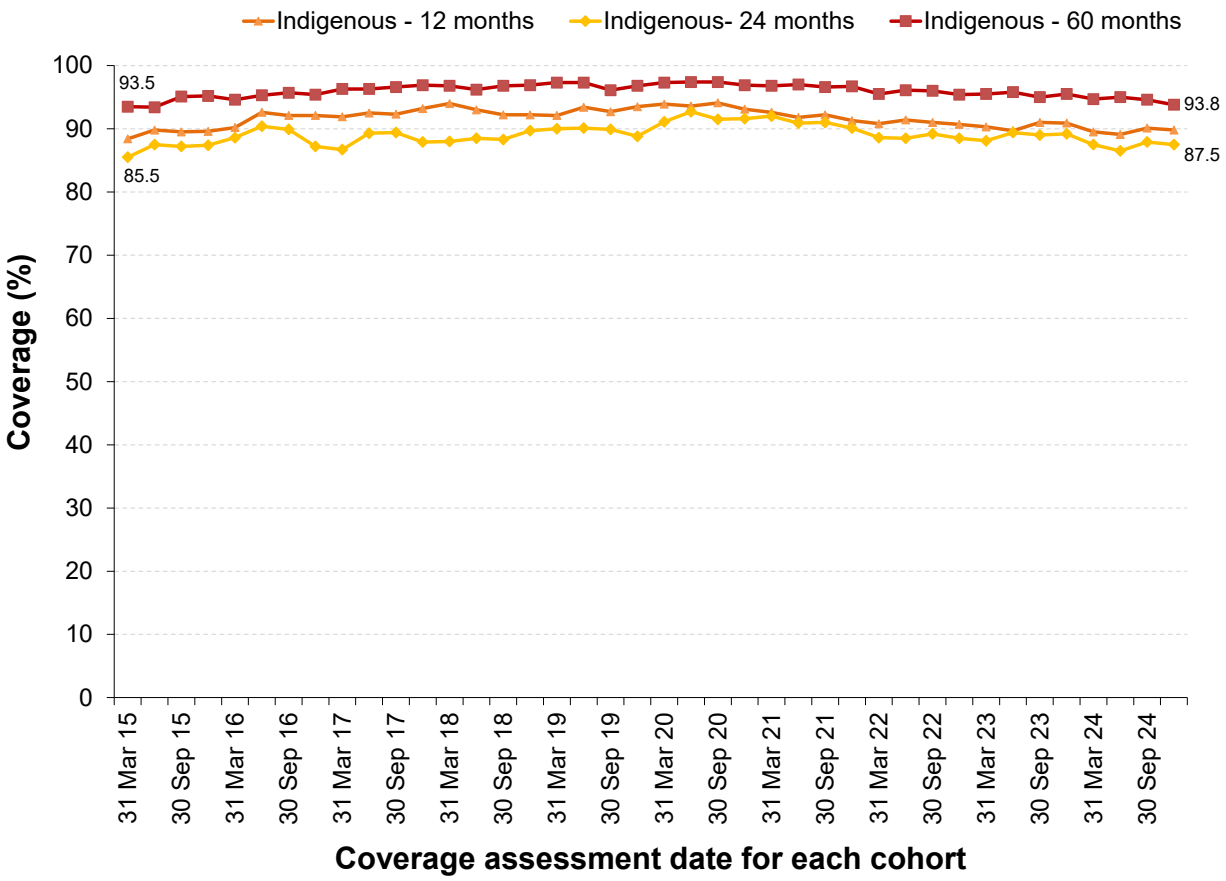
Figure A5. Trends in fully vaccinated coverage at 12, 24 and 60 months of age for Aboriginal and Torres Strait Islander children, by quarter, Australia, 2015–2024



Note: Vaccination coverage estimates are calculated using three-month-wide birth cohorts by quarter and may differ from estimates published elsewhere using rolling annualised data

Source: Australian Immunisation Register

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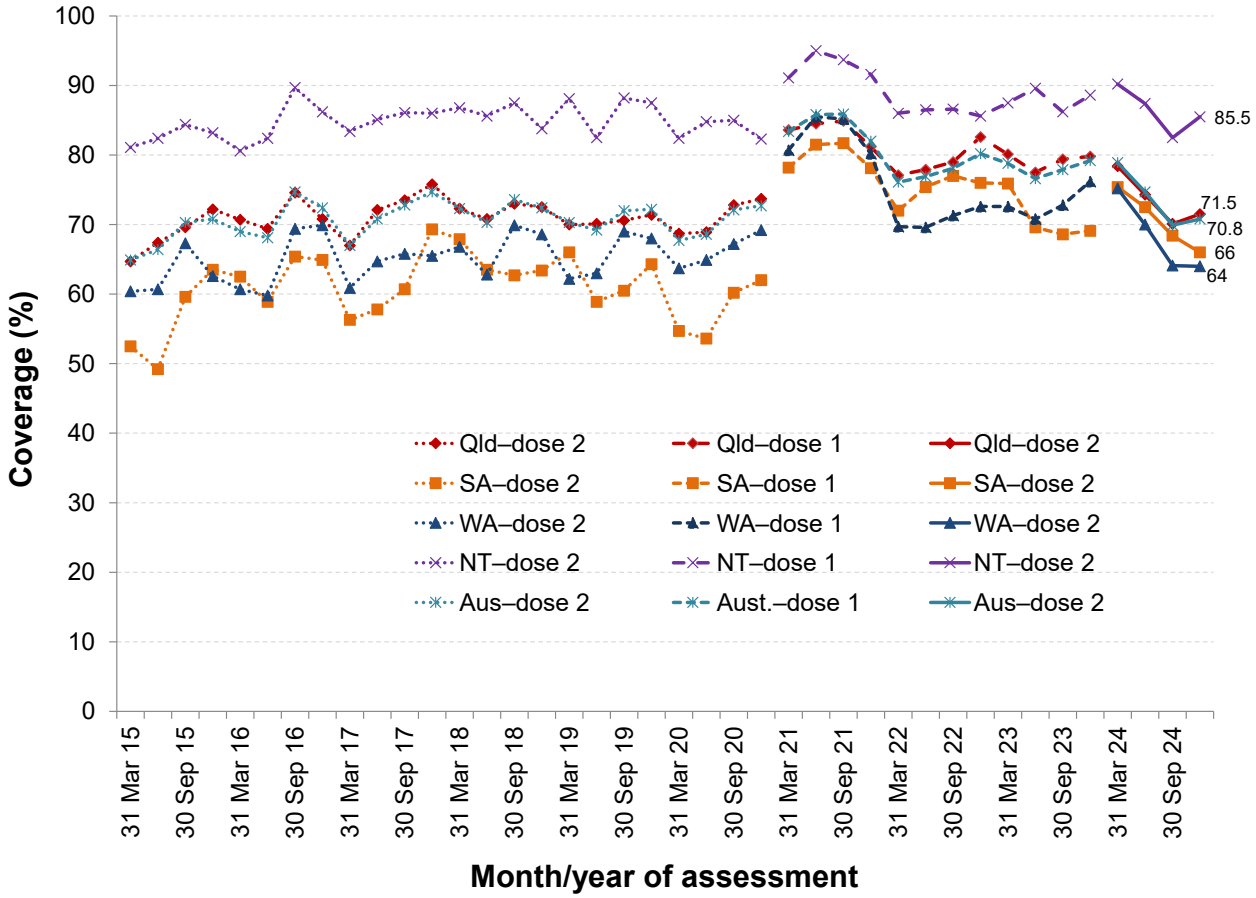
Figure A6. Trends in coverage for hepatitis A vaccine* for Aboriginal and Torres Strait Islander children, by jurisdiction, Australia†, 2015–2024



Note: Vaccination coverage estimates are calculated using three-month-wide birth cohorts by quarter

* From July 2013, scheduled ages for funded hepatitis A vaccination (2 doses) for Aboriginal and Torres Strait Islander children in NT, QLD, SA and WA were at 12 and 18 months and assessed at 30 months of age. From July 2020, scheduled ages for hepatitis A vaccination changed from 12 to 18 months (dose 1) and from 18 months to 4 years (dose 2). From July 2020, only the 18-month dose (dose 1) assessed at 30 months of age. From March 2024, the 4-year dose (dose 2) assessed at 60 months of age.

† NT, Qld, SA and WA only

Qld = Queensland; SA = South Australia; WA = Western Australia; NT = Northern Territory; Aus = Australia

Source: Australian Immunisation Register

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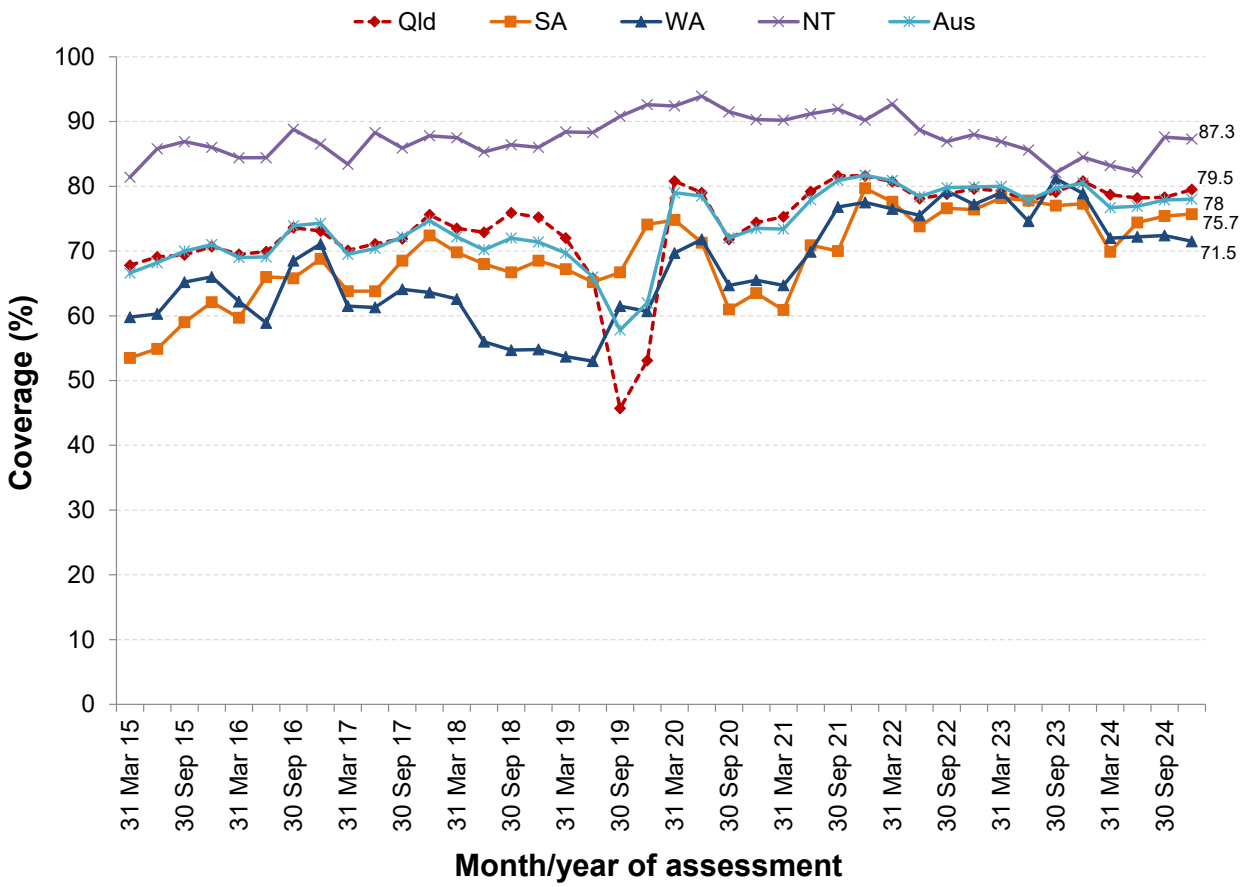
Figure A7. Trends in coverage for pneumococcal* vaccine for Aboriginal and Torres Strait Islander children, by jurisdiction†, Australia, 2015–2024



Note: Vaccination coverage estimates calculated using three-month-wide birth cohorts by quarter

* 12-month booster dose (4th dose) assessed at 30 months of age in all four jurisdictions

† NT, Qld, SA and WA only

13vPCV = 13-valent pneumococcal conjugate vaccine

Qld = Queensland; SA = South Australia; WA = Western Australia; NT = Northern Territory; Aus = Australia

Source: Australian Immunisation Register

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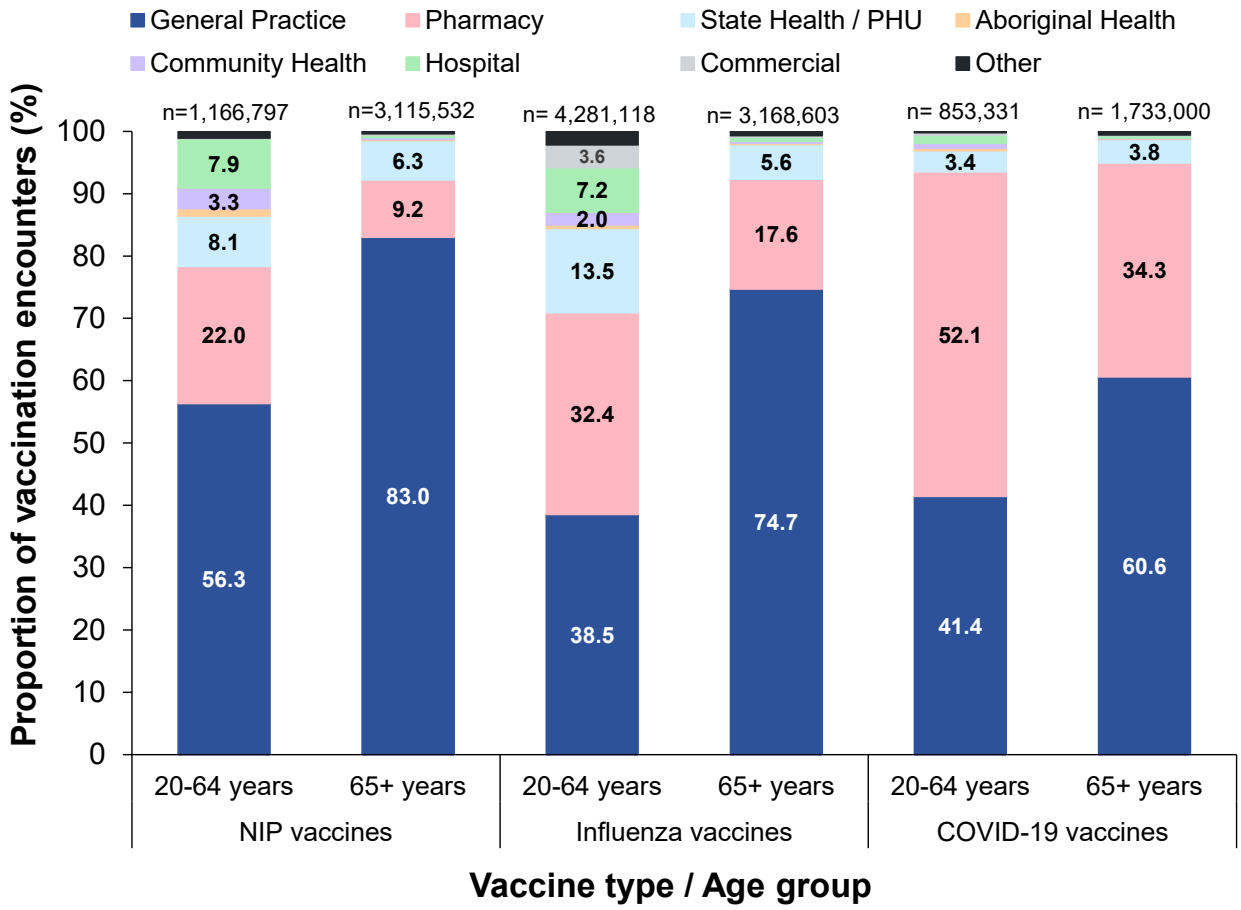
Figure A8. Proportion of vaccinations given to adults aged 20–64 years* and 65+ years* by provider setting† and vaccine type, Australia, 2024



* Based on age at vaccination
† Proportion calculated using the number of vaccine type encounters in each provider setting as the numerator and the total number of vaccine type encounters as the denominator.

Note: n = number of vaccination encounters; NIP vaccines include only those listed as the funded NIP vaccines on the National Immunisation Schedule but exclude influenza vaccines. In some provider settings, such as Aboriginal Health, the reported proportion may be underestimated due to vaccinations given by GPs or pharmacists working in or visiting these settings being linked to provider numbers associated with mainstream general practices or pharmacies. 'Other' provider type includes Flying Doctor Service, Nurse Practitioner, Midwife, Authorised Nurse Immuniser, Council and Residential Care Facility.

Source: Australian Immunisation Register data as at 2 February 2025

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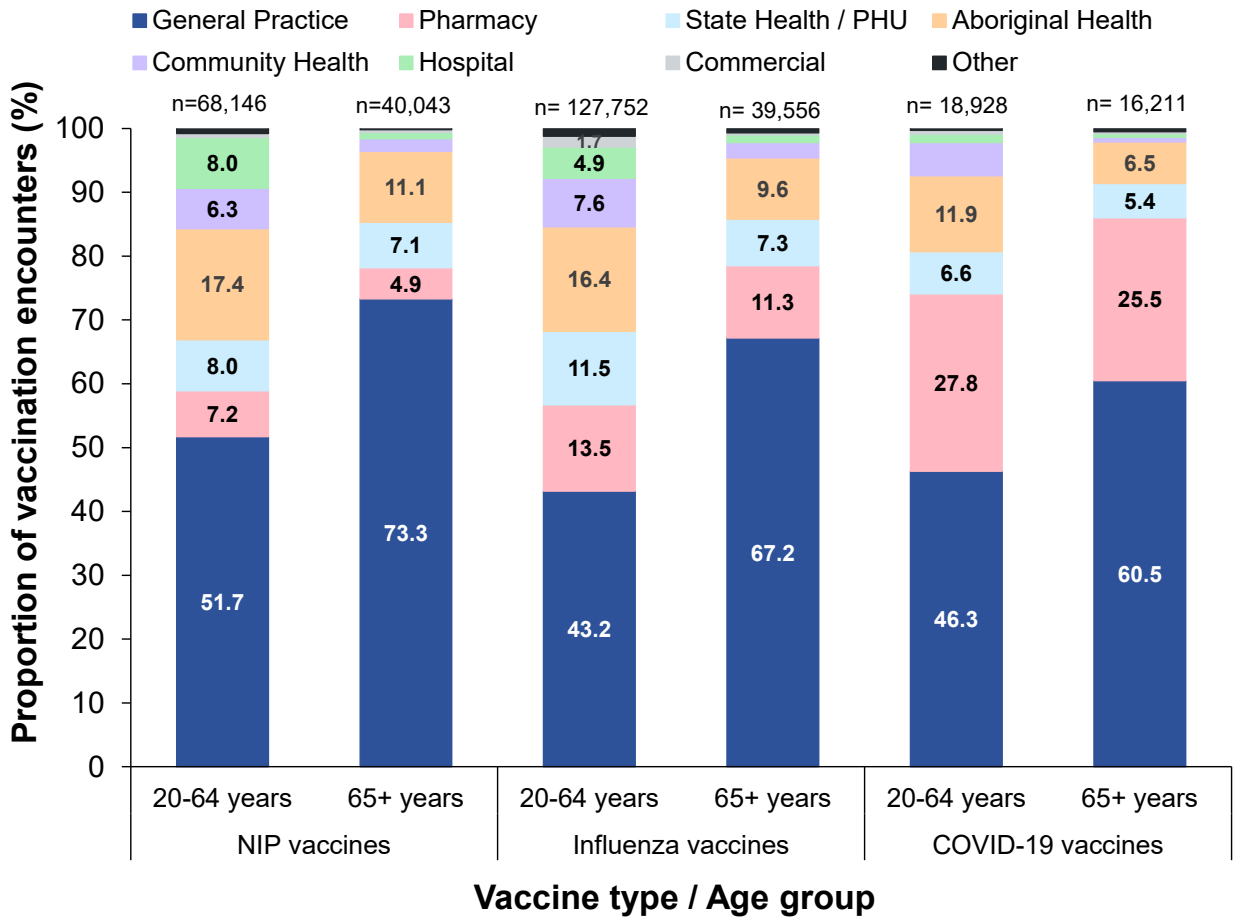
Figure A9. Proportion of vaccinations given to Aboriginal and Torres Strait Islander adults aged 20–64 years* and 65+ years* by provider setting† and vaccine type, Australia, 2024



* Based on age at vaccination
† Proportion calculated using the number of vaccine type encounters in each provider setting as the numerator and the total number of vaccine type encounters as the denominator.

Note: n = number of vaccination encounters; NIP vaccines include only those listed as the funded NIP vaccines on the National Immunisation Schedule but exclude influenza vaccines. In some provider settings, such as Aboriginal Health, the reported proportion may be underestimated due to vaccinations given by GPs or pharmacists working in or visiting these settings being linked to provider numbers associated with mainstream general practices or pharmacies. 'Other' provider type includes Flying Doctor Service, Nurse Practitioner, Midwife, Authorised Nurse Immuniser, Council and Residential Care Facility.

Source: Australian Immunisation Register data as at 2 February 2025

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Table A3. Fully vaccinated coverage assessed at standard age milestones (12, 24 and 60 months) and earlier (9, 15, 21, 51 months) milestones*, all children, by Primary Health Network and jurisdiction, 2024

	Age milestone						
Jurisdiction and PHN	**9mo†**	**12mo†**	**15mo‡**	**21mo‡**	**24mo‡**	**51mo§**	**60mo§**
Australian Capital Territory	**92.7**	**94.6**	**92.1**	**90.4**	**92.8**	**88.7**	**94.4**
Australian Capital Territory	92.7	94.6	92.1	90.4	92.8	88.7	94.4
New South Wales	**88.6**	**91.9**	**88.3**	**85.9**	**89.5**	**86.0**	**92.9**
Central and Eastern Sydney	90.7	93.3	88.1	86.2	89.5	85.0	91.8
Hunter New England and Central Coast	90.4	93.2	90.7	88.1	91.7	87.8	94.3
Murrumbidgee	89.7	92.5	89.3	86.8	90.0	88.0	94.2
Nepean Blue Mountains	88.2	92.0	88.4	85.9	89.7	88.0	94.7
North Coast	82.1	85.5	81.9	79.6	83.6	80.0	94.5
Northern Sydney	91.8	94.0	90.6	89.0	91.5	86.9	87.7
South Eastern NSW	89.8	92.6	89.9	87.2	90.5	86.7	92.7
South Western Sydney	84.5	89.2	85.5	82.7	87.0	84.8	93.6
Western NSW	91.2	94.1	91.1	88.0	91.8	89.4	92.6
Western Sydney	88.0	91.9	87.9	85.9	89.5	85.6	95.7
Victoria	**87.8**	**92.3**	**88.4**	**86.4**	**90.2**	**86.5**	**93.8**
Eastern Melbourne	88.5	92.9	89.1	87.2	90.6	87.1	94.0
Gippsland	85.9	90.3	86.7	84.4	88.7	85.9	93.7
Murray	88.4	93.3	89.3	87.8	91.6	87.0	94.7
North Western Melbourne	87.3	91.9	87.0	85.1	89.1	86.4	93.6
South Eastern Melbourne	87.4	91.9	88.6	86.5	90.5	85.7	93.0
Western Victoria	89.5	93.2	90.6	88.4	92.0	87.6	94.5
Queensland	**86.4**	**90.3**	**86.9**	**84.0**	**88.7**	**83.4**	**91.4**
Brisbane North	89.8	93.0	89.6	87.2	91.7	86.4	93.2
Brisbane South	87.9	91.7	87.8	85.2	89.6	84.1	92.1
Central Queensland, Wide Bay, Sunshine Coast	84.2	87.5	84.4	81.1	85.7	81.0	89.5
Darling Downs and West Moreton	86.3	90.4	88.1	85.4	89.9	84.8	92.3
Gold Coast	82.2	86.3	82.5	79.3	84.7	79.8	88.1
Northern Queensland	85.7	90.7	86.9	83.8	89.1	82.9	91.8
Western Queensland	84.2	89.7	85.8	78.7	85.7	80.2	92.8
South Australia	**88.1**	**91.6**	**88.3**	**85.7**	**89.6**	**86.6**	**93.9**
Adelaide	88.7	92.0	88.5	86.2	89.8	86.9	94.3
Country SA	86.5	90.5	87.8	84.6	89.1	85.7	92.9

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	Age milestone						
Jurisdiction and PHN	**9mo†**	**12mo†**	**15mo‡**	**21mo‡**	**24mo‡**	**51mo§**	**60mo§**
Western Australia	**85.6**	**90.7**	**85.8**	**82.3**	**87.5**	**81.7**	**91.4**
Country WA	81.8	88.5	82.9	77.5	84.2	78.0	89.9
Perth North	87.1	91.5	87.3	84.0	88.9	82.8	91.8
Perth South	86.2	91.0	85.9	83.1	87.8	82.4	91.6
Tasmania	**89.2**	**92.8**	**90.2**	**86.5**	**91.3**	**85.2**	**92.8**
Tasmania	89.2	92.8	90.2	86.5	91.3	85.2	92.8
Northern Territory	**83.9**	**90.4**	**84.8**	**80.7**	**87.3**	**77.5**	**90.8**
Northern Territory	83.9	90.4	84.8	80.7	87.3	77.5	90.8
AUSTRALIA	**87.6**	**91.6**	**87.8**	**85.3**	**89.4**	**85.1**	**92.7**

* Coverage algorithm used for 9-, 21- and 51-month milestones same as for 12-,24- and 60-month milestones, respectively; algorithm used for 15 months same as for 24 months but excludes doses due at 18 months. For further detail on algorithms, refer to Table A2 in the Appendix

† Cohort born 1 January 2023–31 December 2023

‡ Cohort born 1 January 2022–31 December 2022

§ Cohort born 1 January 2019–31 December 2019

PHN = Primary Health Network

Source: Australian Immunisation Register data as at 2 February 2025

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Table A4. Fully vaccinated coverage assessed at standard age milestones (12, 24 and 60 months) and earlier (9, 15, 21, 51 months) milestones*, Aboriginal and Torres Strait Islander children, by Primary Health Network and jurisdiction, 2024

	Age milestone						
Jurisdiction and PHN	**9mo†**	**12mo†**	**15mo‡**	**21mo‡**	**24mo‡**	**51mo§**	**60mo§**
Australian Capital Territory	**83.6**	**88.8**	**85.9**	**83.9**	**90.0**	**80.8**	**93.4**
Australian Capital Territory	83.6	88.8	85.9	83.9	90.0	80.8	93.4
New South Wales	**85.0**	**91.0**	**86.6**	**83.5**	**88.9**	**85.2**	**95.0**
Central and Eastern Sydney	81.0	87.0	83.7	84.3	90.9	81	92.2
Hunter New England and Central Coast	86.5	92.0	88.1	84.9	90.5	87.0	96.0
Murrumbidgee	88.8	93.4	86.7	83.6	87.8	87.9	95.5
Nepean Blue Mountains	86.8	92.2	87.1	85.4	90.1	86.4	95.9
North Coast	81.3	87.3	84.1	79.9	86.1	80.9	92.5
Northern Sydney	83.8	90.5	89.2	85.5	86.8	78.3	86.8
South Eastern NSW	83.3	89.4	85.4	81.6	86.0	84.2	95.1
South Western Sydney	81.6	89.4	84.2	81.9	87.1	84.3	94.9
Western NSW	87.6	93.0	89.0	84.1	89.5	87.2	96.3
Western Sydney	81.4	90.4	84.1	82.3	88.1	82.6	92.9
Victoria	**83.1**	**90.3**	**86.3**	**82.9**	**89.1**	**83.9**	**96.1**
Eastern Melbourne	85.8	90.4	88.9	84.0	89.3	79.7	92.9
Gippsland	81.6	89.8	83.6	80.9	84.9	79.3	95.1
Murray	80.9	89.5	83.0	81.3	88.8	86.3	97.8
North Western Melbourne	80.8	89.0	84.7	81.9	87.5	85.5	96.4
South Eastern Melbourne	84.2	91.2	86.1	83.6	89.1	82.2	95.9
Western Victoria	88.8	93.5	92.8	86.3	93.5	86.7	95.9
Queensland	**79.7**	**88.3**	**83.0**	**78.4**	**86.5**	**81.2**	**94.0**
Brisbane North	83.2	90.3	82.4	77.8	85.8	83.8	95.7
Brisbane South	81.1	88.2	83.3	79.2	87.7	80.6	92.6
Central Queensland, Wide Bay, Sunshine Coast	83.9	89.7	85.1	80.1	87.2	82.5	93.9
Darling Downs and West Moreton	81.3	89.7	83.8	79.9	87.4	83.1	94.6
Gold Coast	76.5	83.2	80.0	75.5	82.6	80.3	91.8
Northern Queensland	75.9	87.4	82.5	78.1	86.9	79.9	94.1
Western Queensland	72.8	84.0	81.0	70.5	80.7	75.1	93.6
South Australia	**80.3**	**89.4**	**83.9**	**76.8**	**84.6**	**83.3**	**95.4**
Adelaide	79.8	88.6	83.2	75.6	83.6	83.8	95.7
Country SA	80.8	90.4	84.9	78.2	85.7	82.8	95.1

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	Age milestone						
Jurisdiction and PHN	**9mo†**	**12mo†**	**15mo‡**	**21mo‡**	**24mo‡**	**51mo§**	**60mo§**
Western Australia	**72.4**	**85.6**	**76.5**	**69.8**	**79.8**	**74.9**	**92.3**
Country WA	71.0	85.8	73.5	67.3	78.2	74.1	92.3
Perth North	72.9	85.3	79.9	73.7	81.5	75.6	91.8
Perth South	74.1	85.5	78.7	72.2	81.2	74.5	91.7
Tasmania	**88.3**	**92.7**	**89.8**	**85.8**	**92.3**	**85.6**	**94.5**
Tasmania	88.3	92.7	89.8	85.8	92.3	85.6	94.5
Northern Territory	**74.2**	**86.9**	**79.8**	**73.9**	**84.8**	**76.3**	**94.3**
Northern Territory	74.2	86.9	79.8	73.9	84.8	76.3	94.3
AUSTRALIA	**81.0**	**89.2**	**83.8**	**79.4**	**86.7**	**81.9**	**94.4**

* Coverage algorithm used for 9-, 21- and 51-month milestones same as for 12-, 24- and 60-month milestones, respectively; algorithm used for 15 months same as for 24 months but excludes doses due at 18 months. For further detail on algorithms, refer to Table A2 in the Appendix

† Cohort born 1 January 2023–31 December 2023

‡ Cohort born 1 January 2022–31 December 2022

§ Cohort born 1 January 2019–31 December 2019

PHN = Primary Health Network

Source: Australian Immunisation Register data as at 2 February 2025

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Table A5. Coverage* of at least one dose of HPV vaccine in adolescents/young adults by birth cohort/age,† gender and jurisdiction, 2024

	Girls							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	82.9	73.2	73.4	69.4	73.0	69.3	71.4	66.3
2010 cohort (14yo)	87.0	78.2	79.4	74.1	75.7	75.3	78.1	70.4
2009 cohort (15yo)	87.4	83.1	83.2	78.9	80.5	81.0	81.1	78.5
2008 cohort (16yo)	91.0	86.8	85.9	82.6	84.5	83.7	85.2	81.9
2007 cohort (17yo)	91.3	87.7	87.9	83.8	86.4	85.7	86.6	85.5
2006 cohort (18yo)	90.9	88.7	88.6	84.4	87.8	85.4	89.4	89.9
2005 cohort (19yo)	91.6	88.3	88.9	85.2	88.2	86.1	90.3	90.0
2004 cohort (20yo)	90.4	88.0	88.7	85.0	88.1	85.3	90.4	91.6
2003 cohort (21yo)	89.1	87.8	88.1	84.7	88.3	86.0	90.0	90.9
2002 cohort (22yo)	88.3	86.0	86.9	84.2	87.8	84.7	88.6	90.8
2001 cohort (23yo)	86.0	83.2	83.5	82.4	86.2	82.6	86.0	89.5
2000 cohort (24yo)	82.2	80.4	80.3	79.8	83.0	78.1	82.0	84.5
1999 cohort (25yo)	79.6	76.2	77.0	76.4	81.6	76.1	77.9	81.4
	Boys							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	79.4	68.6	68.3	65.6	70.2	66.9	65.8	57.3
2010 cohort (14yo)	85.3	74.2	76.6	70.2	73.3	72.4	74.4	63.9
2009 cohort (15yo)	87.7	78.8	80.7	76.3	76.3	79.7	77.1	69.3
2008 cohort (16yo)	88.3	83.5	84.2	80.1	81.7	82.9	82.4	76.9
2007 cohort (17yo)	88.8	85.4	85.6	82.0	84.7	84.4	82.4	81.8
2006 cohort (18yo)	89.8	86.3	86.9	83.0	85.5	85.0	86.2	83.2
2005 cohort (19yo)	88.4	86.5	86.7	83.5	86.9	84.8	87.7	87.1
2004 cohort (20yo)	89.3	85.4	86.5	82.5	86.0	84.5	88.6	88.6
2003 cohort (21yo)	88.4	84.9	86.1	81.6	86.1	83.5	88.1	87.9
2002 cohort (22yo)	88.0	83.2	84.9	80.7	85.1	82.2	85.4	88.0
2001 cohort (23yo)	81.7	78.3	80.4	78.5	83.1	80.1	80.3	84.5
2000 cohort (24yo)	77.7	72.1	75.7	74.0	78.6	72.1	74.8	80.6
1999 cohort (25yo)	74.6	68.0	71.9	68.2	74.5	64.3	71.2	71.4

*Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine by 31 December 2024 as the numerator and the total number of Medicare-registered adolescents in the relevant age cohort as the denominator, expressed as a percentage

† Birth/age cohort based on age turning in 2024

Note: Coverage data for the cohort of 15-year-olds presented in this table include HPV doses given before and after their fifteenth birthday. Data may therefore differ slightly from data presented in Table 3 or published elsewhere, where coverage only includes doses given before the fifteenth birthday (in line with WHO recommendations for international reporting).

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 2 February 2025

Table A6. Coverage* of an adolescent dose of diphtheria-tetanus-pertussis vaccine in all adolescents by birth cohort/age,† gender and jurisdiction, 2024

	Girls							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	84.0	75.3	73.8	71.7	75.7	72.1	71.9	66.7
2010 cohort (14yo)	86.6	79.8	80.9	76.6	78.6	77.7	78.8	70.8
2009 cohort (15yo)	84.1	84.6	84.4	81.1	83.4	83.4	81.5	78.7
2008 cohort (16yo)	88.4	88.6	87.7	85.0	87.3	86.5	85.9	82.8
2007 cohort (17yo)	90.9	89.7	89.6	86.7	89.6	88.9	88.2	86.1
2006 cohort (18yo)	91.9	90.7	90.4	87.5	91.1	89.1	90.4	90.2
2005 cohort (19yo)	91.4	90.2	90.4	88.2	91.5	89.6	90.5	90.7
	Boys							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	81.3	71.5	70.4	68.3	72.7	70.5	67.3	59.6
2010 cohort (14yo)	85.0	76.8	78.6	73.1	76.3	75.8	75.5	66.8
2009 cohort (15yo)	84.7	80.9	82.6	78.7	79.7	82.6	78.5	71.9
2008 cohort (16yo)	86.3	85.9	86.1	82.6	84.8	86.3	82.9	77.3
2007 cohort (17yo)	88.7	87.8	87.7	85.0	87.7	87.7	84.7	82.8
2006 cohort (18yo)	90.2	89.1	89.2	86.2	88.9	88.5	88.4	84.5
2005 cohort (19yo)	88.3	88.8	88.5	86.1	89.4	88.1	86.6	87.1

*

Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥10 years of age) dose of diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) by 31 December 2024 as the numerator and the total number of Medicare-registered adolescents in the relevant age cohort as the denominator, expressed as a percentage

† Birth/age cohort based on age turning in 2024

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 2 February 2025

Table A7. Coverage* of an adolescent dose of meningococcal ACWY vaccine in all adolescents by birth cohort/age,† gender and jurisdiction, 2024

	Girls							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2009 cohort (15yo)	21.9	22.8	16.7	31.0	25.8	32.6	4.3	49.0
2008 cohort (16yo)	77.0	69.4	68.4	66.5	74.1	65.0	77.6	58.4
2007 cohort (17yo)	83.6	73.0	75.7	69.2	77.1	71.2	86.6	78.3
2006 cohort (18yo)	85.7	75.7	78.3	72.9	80.5	75.9	86.5	84.5
2005 cohort (19yo)	87.4	79.1	80.4	77.1	84.0	79.9	86.3	83.8
	Boys							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2009 cohort (15yo)	19.2	16.7	13.1	27.5	23.0	31.5	3.9	43.9
2008 cohort (16yo)	76.2	64.2	63.9	62.2	71.1	63.3	74.6	55.1
2007 cohort (17yo)	81.5	67.8	71.4	65.5	74.2	68.7	84.3	74.6
2006 cohort (18yo)	81.7	68.6	73.9	69.0	76.4	74.3	85.4	79.0
2005 cohort (19yo)	83.6	73.3	76.2	73.9	81.4	77.8	86.2	80.7

* Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥10 years of age) dose of meningococcal ACWY vaccine by 31 December 2024 as the numerator and the total number of Medicare-registered adolescents in the relevant age cohort as the denominator, expressed as a percentage

† Birth/age cohort based on age turning in 2024

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 2 February 2025

Table A8. Coverage* of at least one dose of HPV vaccine in Aboriginal and Torres Strait Islander adolescents/young adults by birth cohort/age,† gender and jurisdiction, 2024

	Girls							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	77.4	66.4	59.7	58.0	54.5	53.4	66.4	59.0
2010 cohort (14yo)	81.3	71.4	72.6	67.5	58.5	65.8	76.8	67.2
2009 cohort (15yo)	83.8	82.4	80.5	76.7	68.6	76.4	78.9	75.9
2008 cohort (16yo)	94.3	88.5	84.4	83.7	75.1	84.0	84.4	79.5
2007 cohort (17yo)	94.1	90.1	86.5	85.5	81.8	87.2	88.4	87.2
2006 cohort (18yo)	94.0	93.0	90.3	88.7	82.9	88.1	93.2	92.9
2005 cohort (19yo)	90.1	93.2	90.0	90.1	85.5	88.2	90.7	93.9
2004 cohort (20yo)	93.3	93.1	90.9	90.1	83.7	89.2	92.2	95.9
2003 cohort (21yo)	91.5	93.0	92.3	89.5	91.6	91.3	93.2	95.1
2002 cohort (22yo)	88.9	90.2	89.3	89.2	87.9	88.6	89.4	95.3
2001 cohort (23yo)	96.2	87.7	87.7	86.7	82.2	88.8	87.9	94.7
2000 cohort (24yo)	88.1	86.8	82.4	83.3	76.5	84.5	81.9	94.3
1999 cohort (25yo)	87.5	80.8	81.8	79.4	80.8	81.7	80.6	90.2
	Boys							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	65.6	58.2	55.0	52.6	49.2	47.8	58.3	49.0
2010 cohort (14yo)	84.0	65.7	66.4	61.2	56.1	59.4	71.9	57.8
2009 cohort (15yo)	82.0	73.5	75.4	70.1	58.1	73.5	74.2	63.7
2008 cohort (16yo)	78.1	82.7	79.9	79.3	68.3	78.5	85.5	75.2
2007 cohort (17yo)	81.5	86.1	84.7	82.6	75.9	84.9	81.1	83.0
2006 cohort (18yo)	83.3	88.6	86.3	83.7	79.9	84.6	86.0	84.9
2005 cohort (19yo)	85.9	88.6	85.2	86.5	81.1	84.0	88.0	88.6
2004 cohort (20yo)	87.8	86.2	90.1	86.9	80.3	84.7	88.0	92.6
2003 cohort (21yo)	86.3	88.2	86.5	85.0	82.9	85.4	85.6	91.9
2002 cohort (22yo)	82.9	84.1	85.3	82.9	81.5	85.5	82.8	92.5
2001 cohort (23yo)	84.1	78.4	79.1	78.8	79.0	80.0	71.4	91.4
2000 cohort (24yo)	71.8	69.5	73.2	75.5	72.0	69.4	74.4	87.3
1999 cohort (25yo)	63.2	62.2	65.6	64.4	60.3	56.9	65.9	76.1

*Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide cohort with an AIR record of having received at least one dose of HPV vaccine by 31 December 2024 as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant age cohort as the denominator, expressed as a percentage

† Birth/age cohort based on age turning in 2024

Note: Coverage data for the cohort of 15-year-olds presented in this table include HPV doses given before and after their fifteenth birthday. Data may therefore differ slightly from data presented in Table 4 or published elsewhere, where coverage only includes doses given before the fifteenth birthday (in line with WHO recommendations for international reporting).

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 2 February 2025

Table A9. Coverage* of an adolescent dose of diphtheria-tetanus-pertussis vaccine in Aboriginal and Torres Strait Islander adolescents by birth cohort/age,† gender and jurisdiction, 2024

	Girls							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	72.6	67.8	59.4	59.5	56.3	55.3	66.8	59.1
2010 cohort (14yo)	83.5	72.3	73.7	68.6	60.4	66.7	78.8	66.3
2009 cohort (15yo)	79.7	83.1	81.5	78.2	70.4	78.0	78.9	74.8
2008 cohort (16yo)	88.6	89.8	84.4	85.0	76.7	85.3	84.6	80.4
2007 cohort (17yo)	94.1	91.7	87.8	87.7	85.7	89.0	90.1	86.6
2006 cohort (18yo)	94.0	94.5	92.7	90.9	86.0	90.4	95.2	93.0
2005 cohort (19yo)	86.4	94.0	90.5	91.6	90.0	91.3	91.0	92.5
	Boys							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2011 cohort (13yo)	68.8	60.3	55.2	55.0	50.9	51.3	56.9	51.2
2010 cohort (14yo)	82.0	67.9	67.2	63.0	58.6	61.6	75.2	61.2
2009 cohort (15yo)	74.0	75.8	76.4	72.1	62.0	75.0	75.6	66.1
2008 cohort (16yo)	74.4	85.0	81.4	81.4	70.0	80.4	81.5	74.0
2007 cohort (17yo)	84.8	87.9	86.0	84.8	78.4	86.2	84.4	82.0
2006 cohort (18yo)	78.4	91.1	87.8	86.4	84.1	86.2	90.0	84.6
2005 cohort (19yo)	81.3	88.7	87.5	87.4	84.3	85.8	86.7	86.6

*Coverage calculated using the number of Medicare-registered adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥10 years of age) dose of diphtheria-tetanus-pertussis vaccine (recorded as either dTpa or DTPa) by 31 December 2024 as the numerator and the total number of Medicare-registered adolescents in the relevant age cohort as the denominator, expressed as a percentage

† Birth/age cohort based on age turning in 2024

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 2 February 2025

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Table A10. Coverage* of an adolescent dose of meningococcal ACWY vaccine in Aboriginal and Torres Strait Islander adolescents by birth cohort/age,† gender and jurisdiction, 2024

	Girls							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2009 cohort (15yo)	9.5	17.4	10.7	26.1	16.7	21.8	2.3	36.7
2008 cohort (16yo)	52.9	53.4	50.3	54.5	44.3	47.4	76.6	46.7
2007 cohort (17yo)	77.9	58.5	63.8	64.4	62.0	59.4	86.0	82.2
2006 cohort (18yo)	70.2	63.1	63.9	68.5	68.7	67.4	88.0	88.5
2005 cohort (19yo)	66.7	69.5	68.6	73.4	71.2	69.2	85.3	89.1
	Boys							
Birth cohort (age turning in 2024)	**ACT**	**NSW**	**Vic**	**Qld**	**SA**	**WA**	**Tas**	**NT**
2009 cohort (15yo)	12.0	11.4	8.0	22.0	15.0	22.3	3.2	28.3
2008 cohort (16yo)	57.3	45.7	43.5	49.2	43.3	41.5	75.4	44.4
2007 cohort (17yo)	73.9	52.3	53.5	57.8	56.1	57.0	84.4	80.4
2006 cohort (18yo)	64.7	52.7	60.6	64.0	60.3	62.6	86.3	87.6
2005 cohort (19yo)	76.6	58.4	62.1	69.9	60.9	64.2	87.7	87.5

*Coverage calculated using the number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in each year-wide cohort with an AIR record of having received an adolescent (i.e. ≥10 years of age) dose of meningococcal ACWY vaccine by 31 December 2024 as the numerator and the total number of Medicare-registered Aboriginal and Torres Strait Islander adolescents in the relevant age cohort as the denominator, expressed as a percentage

† Birth/age cohort based on age turning in 2024

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 2 February 2025

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Table A11. Recorded coverage* of seasonal influenza vaccine by age group and jurisdiction, 2023 and 2024, Australia

Age group	Jurisdiction															
	ACT		NSW		Vic		Qld		SA		WA		Tas		NT	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
6mo – <5yrs	55.0	52.1	28.3	25.4	34.5	32.2	26.0	23.7	30.5	28.8	28.4	22.9	36.4	32.6	43.4	45.5
5 – <10yrs	28.4	25.8	16.9	14.9	19.2	16.9	15.9	14.9	17.0	15.9	20.1	14.5	17.5	15.5	17.0	15.1
10 – <20yrs	20.6	18.1	13.8	12.1	16.0	13.9	14.7	14.0	15.5	14.0	17.5	12.4	15.7	13.5	18.4	17.0
20 – <50yrs	35.1	33.6	22.3	20.8	26.8	25.1	22.1	20.5	27.4	25.8	23.1	18.5	26.8	25.0	26.0	25.8
50 – <65yrs	46.8	43.8	34.7	31.3	39.1	35.2	36.7	33.3	41.3	37.7	37.9	29.7	45.0	40.3	29.4	27.6
≥ 65yrs	68.2	65.9	61.5	59.5	65.2	63.0	64.8	62.1	69.4	67.8	65.4	59.7	71.4	69.2	38.5	36.3

* Coverage calculated by dividing the number of Medicare-registered people with at least one dose of influenza vaccine administered in the calendar year of interest by the total number of Medicare-registered people registered in each age group. Vaccination numerators based on age at vaccination and age group denominators based on age at 30 June in relevant year. Coverage data in this table may differ from estimates published elsewhere due to differences in calculation methodologies and/or the AIR data being used in the calculation having been downloaded on different dates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and 2 February (for 2024 data)

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Table A12. Recorded coverage* of seasonal influenza vaccine for Aboriginal and Torres Strait Islander persons by age group and jurisdiction, 2023 and 2024, Australia

Age group	Jurisdiction															
	ACT		NSW		Vic		Qld		SA		WA		Tas		NT	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
6mo – <5yrs	35.3	38.0	20.5	19.0	24.6	24.1	19.9	17.8	19.8	18.8	21.8	18.4	31.8	25.4	49.9	48.6
5 – <10yrs	18.3	16.2	12.8	11.9	13.1	12.3	12.7	11.4	12.8	12.4	16.7	11.1	15.9	13.1	28.1	24.4
10 – <20yrs	16.5	15.8	13.6	12.5	13.8	13.1	14.7	13.8	14.3	13.7	15.7	11.0	14.7	12.7	29.9	27.2
20 – <50yrs	26.3	27.7	19.2	18.8	21.4	20.8	19.8	18.4	22.8	21.8	20.5	15.9	24.0	21.8	39.5	37.2
50 – <65yrs	45.2	47.1	40.7	38.2	41.2	39.5	40.7	37.8	43.0	40.0	39.1	32.8	51.1	47.6	51.4	48.5
≥ 65yrs	70.2	67.3	66.3	64.1	66.8	64.8	63.9	62.6	64.5	62.7	58.5	54.3	76.9	72.1	53.4	48.9

* Coverage calculated by dividing the number of Medicare-registered persons with at least one dose of influenza vaccine administered in the calendar year of interest by the total number of Medicare-registered persons registered in each age group. Vaccination numerators based on age at vaccination and age group denominators based on age at 30 June in relevant year. Coverage data in this table may differ from estimates published elsewhere due to differences in calculation methodologies and/or the AIR data being used in the calculation having been downloaded on different dates

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Source: Australian Immunisation Register data as at 4 February 2024 (for 2023 data) and 2 February (for 2024 data)

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Table A13. Proportion of vaccinations administered to all adults aged ≥20 years by provider setting,* age at vaccination and jurisdiction, 2024, Australia

	Provider setting	Jurisdiction															
		ACT		NSW		Vic		Qld		SA		WA		Tas		NT	
		20-64	65+	20-64	65+	20-64	65+	20-64	65+	20-64	65+	20-64	65+	20-64	65+	20-64	65+
NIP vaccines	**General Practice**	48.7	78.2	57.1	81.1	59.8	78.8	59.7	89.6	46.7	86.7	49.8	83.2	51.4	82.4	30.4	61.9
	Pharmacy	26.1	11.5	22.4	10.2	21.0	13.4	20.0	4.6	24.6	4.2	26.3	9.9	27.4	11.3	7.0	4.3
	State Health/ PHU	5.3	8.9	8.3	7.4	8.9	6.7	6.8	4.5	9.8	7.3	8.6	4.6	5.4	5.4	7.2	17.1
	Community Health	5.6	0.1	3.0	0.1	1.5	0.2	4.3	0.3	2.8	0.1	5.0	1.1	1.3	0.3	15.3	7.0
	Hospital	12.9	0.9	7.9	0.5	6.9	0.5	7.3	0.3	12.8	0.5	5.6	0.1	12.4	0.2	15.0	0.9
	Aboriginal Health	1.3	0.4	1.1	0.3	0.4	0.1	0.6	0.1	1.6	0.2	1.6	0.3	1.7	0.2	24.5	8.0
	Commercial	0.0	0.0	0.1	0.2	0.1	0.0	0.2	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0
Influenza vaccines	**General Practice**	28.4	62.9	40.4	75.0	39.6	77.2	43.2	78.1	30.0	71.2	32.4	67.0	33.8	70.9	25.0	54.6
	Pharmacy	31.8	24.9	31.1	16.5	27.8	14.8	33.1	15.8	35.9	21.2	44.9	26.6	44.2	24.0	13.0	9.9
	State Health/ PHU	23.1	10.7	11.7	6.5	16.2	5.9	12.0	4.6	17.5	5.5	8.8	3.5	10.8	4.0	16.4	15.8
	Community Health	2.9	0.1	1.6	0.2	0.6	0.2	3.6	0.3	1.9	0.1	2.9	0.6	0.8	0.2	10.5	6.9
	Hospital	5.4	0.5	9.5	0.7	7.7	0.8	5.0	0.5	3.9	0.4	6.5	1.1	6.6	0.3	8.7	1.5
	Aboriginal Health	0.3	0.2	0.4	0.2	0.2	0.1	0.3	0.1	0.5	0.2	0.8	0.3	0.7	0.2	25.0	10.4
	Commercial	7.7	0.4	4.7	0.3	3.6	0.2	2.0	0.1	3.4	0.1	2.9	0.2	1.4	0.1	0.8	0.2
COVID vaccines	**General Practice**	28.6	46.3	47.0	64.3	43.5	64.6	44.6	63.8	24.8	40.9	28.2	49.9	35.6	54.9	27.8	55.2
	Pharmacy	58.9	42.8	47.0	30.3	49.8	30.7	50.2	32.5	70.0	52.6	65.1	44.8	60.9	41.8	33.6	29.5
	State Health/	7.2	10.1	3.3	4.6	3.6	3.5	2.4	3.1	2.5	2.6	3.0	2.8	2.5	3.2	12.4	8.9

	PHU																
	Community Health	1.9	0.0	0.6	0.0	0.3	0.1	1.4	0.1	0.6	0.0	1.2	0.3	0.3	0.2	9.4	1.9
	Hospital	0.1	0.1	1.2	0.1	1.8	0.5	0.9	0.2	0.7	0.3	1.6	1.8	0.1	0.0	2.1	0.8
	Aboriginal Health	0.2	0.2	0.3	0.1	0.2	0.1	0.2	0.1	0.6	0.1	0.6	0.2	0.4	0.1	14.2	3.9
	Commercial	3.1	0.0	0.5	0.1	0.2	0.1	0.2	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.1	0.0

* Proportion calculated using the number of vaccine type encounters given to the relevant age group in each provider setting as the numerator and the total number of vaccine type encounters given to the relevant age group as the denominator. Vaccination encounters categorised into age groups based on age at vaccination.

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Note: NIP vaccines include only those listed as funded vaccines on the National Immunisation Schedule but excludes influenza vaccines as these are counted separately. In some provider settings, such as Aboriginal Health, the reported proportion may be underestimated due to vaccinations given by GPs or pharmacists working in or visiting these settings being linked to provider numbers associated with mainstream general practices or pharmacies. Proportions do not tally 100% as the small proportion of vaccines given in 'other' settings including Flying Doctor Service, Nurse Practitioner, Midwife, Authorised Nurse Immuniser, Council and Residential Care Facility are not shown.

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Table A14. Proportion of vaccinations administered to Aboriginal and Torres Strait Islander adults aged ≥20 years by provider setting,* age at vaccination and jurisdiction, 2024, Australia

	Provider setting	**Jurisdiction**															
		ACT		**NSW**		**Vic**		**Qld**		**SA**		**WA**		**Tas**		**NT**	
		20-64	**65+**	**20-64**	**65+**	**20-64**	**65+**	**20-64**	**65+**	**20-64**	**65+**	**20-64**	**65+**	**20-64**	**65+**	**20-64**	**65+**
NIP vaccines	**General Practice**	38.4	63.4	56.0	74.2	54.9	74.6	59.9	78.5	41.2	69.6	44.3	63.9	56.6	79.9	22.2	37.4
	Pharmacy	11.8	4.8	9.5	6.4	9.6	7.9	6.1	2.7	6.2	2.1	6.4	4.7	11.9	5.6	1.0	1.0
	State Health/ PHU	5.6	8.8	8.1	8.5	7.7	6.0	8.5	6.4	9.3	8.8	10.0	5.2	6.1	5.6	4.6	5.2
	Community Health	3.6	0.2	3.2	0.2	1.5	0.5	7.8	3.5	4.9	0.4	11.5	5.9	1.3	0.6	12.2	8.9
	Hospital	8.8	0.5	8.5	0.8	5.4	0.5	9.3	1.8	8.8	0.3	3.0	0.1	6.8	0.1	9.3	2.0
	Aboriginal Health	31.7	22.4	14.0	9.1	19.3	10.1	5.7	5.3	28.9	17.4	22.8	19.5	16.8	8.1	50.6	45.6

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	Commercial	0.1	0.0	0.2	0.3	0.5	0.0	1.4	1.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0
Influenza vaccines	**General Practice**	31.9	59.6	49.8	70.4	48.0	74.1	54.6	73.0	39.0	61.0	36.4	55.0	47.7	73.6	14.1	28.5
	Pharmacy	19.3	16.3	16.5	12.4	16.0	10.8	14.4	10.0	13.1	13.4	14.4	14.2	24.5	15.1	1.0	0.9
	State Health/ PHU	20.0	10.2	9.7	7.9	13.0	6.0	11.4	7.6	15.0	8.8	8.6	5.1	8.3	3.6	14.7	9.6
	Community Health	3.9	0.3	4.9	0.5	1.5	0.5	8.2	2.9	4.1	0.8	15.5	7.7	1.7	0.5	13.0	10.2
	Hospital	3.9	0.0	7.8	1.0	5.9	0.8	4.8	2.0	4.1	1.2	2.2	0.8	4.0	0.3	1.3	1.3
	Aboriginal Health	13.2	12.8	8.1	6.8	8.9	6.4	4.2	3.4	19.4	13.3	20.4	16.5	10.7	6.3	55.7	49.3
	Commercial	7.6	0.8	2.5	0.3	2.9	0.4	1.3	0.4	1.5	0.1	1.5	0.1	1.0	0.1	0.1	0.0
COVID vaccines	**General Practice**	32.1	50.4	53.4	63.4	47.0	64.3	57.4	65.1	33.1	39.8	33.8	46.1	46.6	62.7	16.1	42.2
	Pharmacy	43.4	29.4	29.8	25.0	33.9	24.4	25.8	24.4	32.4	41.4	29.5	29.5	39.8	28.4	4.3	10.1
	State Health/ PHU	6.5	8.8	6.0	6.0	4.6	4.6	4.1	4.8	6.7	6.5	3.9	3.1	3.8	4.6	21.6	8.3
	Community Health	2.0	0.0	1.6	0.1	1.2	0.3	6.4	0.5	3.7	0.7	9.5	3.1	0.7	0.6	19.1	5.0
	Hospital	0.4	0.0	1.1	0.2	3.0	0.5	1.1	0.8	0.4	0.2	1.4	1.9	0.1	0.0	1.5	2.6
	Aboriginal Health	11.3	11.0	7.5	4.6	9.1	5.3	3.7	3.1	22.6	7.8	21.2	15.8	7.9	3.1	37.1	31.2
	Commercial	4.3	0.0	0.5	0.2	0.7	0.1	1.1	0.7	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0

˙ Proportion calculated using the number of vaccine type encounters given to the relevant age group in each provider setting as the numerator and the total number of vaccine type encounters given to the relevant age group as the denominator. Vaccination encounters categorised into age groups based on age at vaccination.

ACT = Australian Capital Territory; NSW = New South Wales; Vic = Victoria; Qld = Queensland; SA = South Australia; WA = Western Australia; Tas = Tasmania; NT = Northern Territory

Note: NIP vaccines include only those listed as funded vaccines on the National Immunisation Schedule but excludes influenza vaccines as these are counted separately. In some provider settings, such as Aboriginal Health, the reported proportion may be underestimated due to vaccinations given by GPs or pharmacists working in or visiting these settings being linked to provider numbers associated with mainstream general practices or pharmacies. Proportions do not tally 100% as the small proportion of vaccines given in 'other' settings including Flying Doctor Service, Nurse Practitioner, Midwife, Authorised Nurse Immuniser, Council and Residential Care Facility are not shown.

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