



National Partnership on Essential Vaccines: performance report

2020-21



National Partnership on Essential Vaccines: performance report 2020–21

The AIHW is an independent statutory Australian Government agency producing authoritative and accessible information and statistics to inform and support better policy and service delivery decisions, leading to better health and wellbeing for all Australians.

© The Australian Institute of Health and Welfare 2022



All material presented in this document is provided under a Creative Commons Attribution 4.0 International licence, with the exception of the Commonwealth Coat of Arms (the terms of use for the Coat of Arms are available at https://www.pmc.gov.au/government/commonwealth-coat-arms) or any material owned by third parties, including for example, design, layout or images obtained under licence from third parties and signatures. All reasonable efforts have been made to identify and label material owned by third parties.

The details of the relevant licence conditions are available on the Creative Commons website (available at https://creativecommons.org), as is the full legal code for the CC BY 4.0 license.

A complete list of the Institute's publications is available from the Institute's website www.aihw.gov.au.

ISBN 978-1-76054-974-9 (Online) ISBN 978-1-76054-973-2 (Print)

DOI: 10.25816/8sk8-cj63

Suggested citation

Australian Institute of Health and Welfare (2022) *National Partnership on Essential Vaccines: performance report 2020–21*, catalogue number HPF 68, AlHW, Australian Government.

Australian Institute of Health and Welfare

Board Chair Mrs Louise Markus Chief Executive Officer Mr Rob Heferen

Any enquiries about or comments on this publication should be directed to: Australian Institute of Health and Welfare GPO Box 570 Canberra ACT 2601

Tel: (02) 6244 1000 Email: info@aihw.gov.au

Published by the Australian Institute of Health and Welfare.

Please note that there is the potential for minor revisions of data in this report. Please check the online version at www.aihw.gov.au for any amendments.

Contents

Summary	iv
1 Introduction	1
The National Partnership on Essential Vaccines	1
The performance benchmarks	2
2 Assessment against the benchmarks	5
New South Wales	5
Victoria	8
Queensland	11
Western Australia	14
South Australia	17
Tasmania	20
Northern Territory	23
Australian Capital Territory	26
Appendix A: Detailed benchmark specifications	29
Appendix B: Summary of performance assessment data, by benchmark	34
Abbreviations	39
Symbols	39
List of tables	40
Related publications	43

Summary

This report provides an assessment of state and territory performance against the performance benchmarks outlined in the National Partnership on Essential Vaccines (NPEV), for the fourth year of the agreement, covering the assessment period 1 April 2020 to 31 March 2021.

The NPEV is an agreement between the Commonwealth of Australia and the states and territories, which aims "to protect the Australian public from the spread of vaccine preventable diseases through the cost-effective and efficient delivery of immunisation programs under the National Immunisation Program".

The performance benchmarks assessed in this report are:

- 1. an increase in vaccination coverage rates for 60–<63 month olds relative to the baseline;
- an increase in the vaccination coverage rates for Aboriginal and Torres Strait Islander people in at least two of the following three age cohorts: 12–<15 months; 24–<27 months; and 60–<63 months, relative to the baseline;
- 3. an increase in the vaccination coverage rate for both adolescent boys and adolescent girls for HPV, relative to the baseline;
- 4. an increase in vaccination coverage rates for 60–<63 month olds in four of the ten lowest vaccination coverage SA3 geographical areas in each jurisdiction, relative to the baseline; and
- 5. an annual decrease in the wastage and leakage rate for agreed vaccines, relative to the baseline.

A performance milestone of "provision of annual schools HPV immunisation data for the previous school year by 30 April each year" is also specified in the Agreement. For the fourth year of the Agreement, all states and territories achieved this milestone.

Three jurisdictions (Queensland, Western Australia and the Northern Territory) met all 5 benchmarks assessed in this report.

Table S1: Achievement against NPEV benchmarks assessed for the period 1 April 2020 to 31 March 2021, by state and territory

						Number of benchmarks fully
State/territory	PB1	PB2	PB3	PB4	PB5	met
NSW	✓	✓	✓	PARTLY	✓	4
Vic.	✓	✓	✓	PARTLY	✓	4
Qld	✓	✓	✓	✓	✓	5
WA	✓	✓	✓	✓	✓	5
SA	✓	✓	✓	PARTLY	✓	4
Tas.	×	✓	✓	PARTLY	✓	3
NT	✓	✓	✓	✓	✓	5
ACT	✓	✓	✓	PARTLY	×	3

Note: A list of the NPEV benchmarks and their detailed specifications is in Appendix A.

1 Introduction

This report assesses the performance of state and territory governments against the benchmarks set out in the National Partnership on Essential Vaccines (NPEV; the Agreement).

The National Partnership on Essential Vaccines

The NPEV is an agreement between the Commonwealth of Australia and the states and territories. The objective of the Agreement is "to protect the Australian public from the spread of vaccine preventable diseases through the cost-effective and efficient delivery of immunisation programs under the National Immunisation Program (NIP)"¹.

The NIP is a joint initiative of the Commonwealth and the states and territories, making free vaccines for several key diseases available to eligible individuals through a range of vaccination providers in accordance with the National Immunisation Schedule (available at www.health.gov.au/immunisation).

The NPEV is intended to facilitate achievement of 6 key outcomes, namely to:

- a) minimise the incidence of vaccine preventable diseases in the eligible Australian population for diseases with vaccines listed under the NIP;
- b) minimise the incidence of vaccine preventable diseases in Aboriginal and Torres Strait Islander people for diseases with vaccines listed under the NIP;
- c) minimise the incidence of human papillomavirus (HPV) in the eligible Australian population;
- d) ensure that Australian HPV immunisation data is provided to the Commonwealth annually;
- e) minimise the incidence of vaccine preventable diseases in the eligible Australian population in geographic areas of low coverage; and
- f) ensure that vaccines listed under the NIP are managed in a way that minimises wastage and leakage, with a target rate of wastage and leakage of 5% or lower.

A set of 5 performance benchmarks and one milestone are specified in the Agreement to inform the assessment of progress contributing to the above outcomes. The Commonwealth makes a financial contribution to states and territories based on the cost of vaccine purchases by each state and territory following annual assessments against whether these benchmarks and milestone have been met.

The Australian Institute of Health and Welfare has been tasked with providing an independent assessment as to whether the benchmarks have been met for the fourth year of the agreement. That assessment is contained in this report.

Note that the benchmarks specified in the NPEV were established in 2017 and do not include vaccines for COVID-19. A list of the vaccines included in the coverage assessments in this report is provided in Table 1.

¹ Australian Government 2017. National Partnership on Essential Vaccines. Accessed 17 October 2018, http://www.federalfinancialrelations.gov.au/content/npa/health/national-partnership/Signed_NPA_-essential_vaccines.pdf

The performance benchmarks

The 5 performance benchmarks specified in the NPEV are:

- 1. an increase in vaccination coverage rates for 60–<63 month olds relative to the baseline;
- 2. an increase in the vaccination coverage rates for Aboriginal and Torres Strait Islander people in at least two of the following three age cohorts: 12–<15 months; 24–<27 months; and 60–<63 months, relative to the baseline;
- 3. an increase in the vaccination coverage rate for both adolescent boys and adolescent girls for HPV, relative to the baseline;
- 4. an increase in vaccination coverage rates for 60–<63 month olds in four of the ten lowest vaccination coverage SA3 geographical areas, relative to the baseline; and
- 5. an annual decrease in the wastage and leakage rate for agreed vaccines, relative to the baseline.

More detailed specifications for each benchmark are provided at Appendix A.

A performance milestone of "provision of annual schools HPV immunisation data for the previous school year by 30 April each year" is also specified in the Agreement. For the 2020 school year, assessment of whether the states and territories achieved this milestone was undertaken by the Commonwealth Department of Health. Information on this milestone is also included in this report.

Assessing performance

Schedule C of the NPEV specifies how each performance benchmark is to be measured and assessed. Details are in Appendix A, and summarised below.

Note that coverage rates measured for these benchmarks are based on the proportion of children who are 'fully immunised' for their age, as defined by the Australian Immunisation Register. This definition may change over time along with changes to the NIP Schedule. For the reference period of the benchmarks assessed in this report (1 April 2020 to 31 March 2021) the definitions used were those specified in Table 1.

The reference period assessed in this report was during the COVID-19 pandemic, with initial lockdowns beginning in Australia in late March 2020. The data suggest, however, that there was little or no impact on routine childhood vaccination during this period.

Benchmark 1: An increase in vaccination coverage for 60-<63 month olds

- Measured as percentage of children aged 60–<63 months reported as fully immunised, compared with the baseline.
- The baseline for each assessment period is the average coverage rate of the previous 3
 years for that jurisdiction.
- Where a jurisdiction achieves a coverage rate for the reference period of 95% or higher, it will be deemed to have met the benchmark.

Benchmark 2: An increase in vaccination coverage for Aboriginal and Torres Strait Islander people

Measured as percentage of children aged 12–<15, 24–<27 and 60–<63 months reported
as fully immunised, compared with the baseline for each cohort.

- The baseline for each assessment period is the lowest coverage rate from the previous 3 years for that jurisdiction, for each cohort.
- Where a jurisdiction achieves a coverage rate for the assessment period of 95 per cent or higher for a particular cohort, it will be deemed to have met the target for that cohort.
- This benchmark is deemed to have been met if an increase (or a 95% coverage rate) is achieved in at least 2 of the 3 cohorts.

Benchmark 3: An increase in vaccination coverage for HPV (not assessed in this report)

- Measured as percentage of adolescents meeting a full-dose HPV (2-dose or 3-dose depending on age) immunisation by age 15, compared with the baseline.
- The baseline for each assessment period is the average coverage rate of the previous 3 years for that jurisdiction.
- This benchmark is deemed to have been met if an increase is achieved for both boys and girls.

Benchmark 4: An increase in vaccination coverage in low coverage areas

- Measured as percentage of children aged 60–<63 months in each nominated SA3 reported as fully immunised, compared with the baseline.
- The baseline for each assessment period is the previous year's coverage rate for the specified SA3.
- For the purposes of this benchmark, a geographical area of low coverage is included if it is in the 10 lowest areas in the jurisdiction with coverage below 95%. SA3 areas with fewer than 100 children aged 60-<63 months are excluded. States and territories will notify the Commonwealth by August of each year of the 4 nominated areas to be targeted that year.
- If all SA3 areas in a jurisdiction have coverage above 95%, this benchmark is deemed to have been met.

Benchmark 5: Decreasing wastage and leakage

- Measured as the percentage of NIP vaccines lost to wastage and leakage, compared with the baseline.
- The baseline for each assessment period is the previous year's wastage and leakage rate for that jurisdiction.
- For newly introduced vaccines, a baseline of 10% will be applied.
- All vaccines on the NIP provided to children are included. Those provided to other at-risk groups are excluded.
- The calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the Australian Immunisation Register.
- The calculation discounts vaccines lost to uncontrollable events such as natural disasters, power outages or refrigeration failures, as specified in reports by the relevant jurisdiction.
- Where a state or territory achieves a wastage and leakage rate of 5% or lower, it will be deemed to have met the benchmark.

- A decrease in the wastage and leakage rate (or a result of less than 5%) must be achieved for both the previously assessed and newly introduced vaccine categories for this benchmark to be met.
- A policy change during the 2020-21 assessment period meant that Prevenar 13
 (pneumococcal vaccine) was also provided on the NIP to other (non-child) at-risk
 groups. As benchmark 5 relates solely to vaccines provided to children, the assessment
 for Year 4 was therefore calculated excluding data for Prevenar 13.

Table 1: Definition of 'fully immunised' by age cohort, as at 1 April 2020

Age cohort	Vaccine						
12 to <15 month ag	12 to <15 month age cohort						
DTP	Diphtheria dose 3 + Tetanus dose 3 + Pertussis dose 3						
Polio	Polio dose 3						
HIB	Haemophilus type B dose 3						
НерВ	Hepatitis B dose 3						
MMR	Not assessed						
Pneumo [†]	Pneumococcal dose 2						
Fully Vaccinated	DTP + Polio + HIB + HepB + Pneumococcal (All previous doses are presumed as given)						
Only those immunisa	Only those immunisation services a child has received up to 6 months of age are included in the report.						
24 to <27 month ag	24 to <27 month age cohort						
DTP	Diphtheria dose 4 + Tetanus dose 4 + Pertussis dose 4						

Polio Polio dose 3

HIB Haemophilus type B dose 4

HepB Hepatitis B dose 3

MMR Measles dose 2 + Mumps dose 2 + Rubella dose 2

Varicella dose 1

Pneumo[†] Pneumococcal dose 3

MenC Meningococcal ACWY dose 1

Fully Vaccinated DTP + Polio + HIB + HepB + MMR+ Varicella + MenC (All previous doses are presumed as given)

Only those immunisation services a child has received up to 24 months of age are included in the report.

60 to <63 month age cohort

DTP Diphtheria dose 4 or 5 + Tetanus dose 4 or 5 + Pertussis dose 4 or 5

Polio dose 4
HIB Not assessed
Hep B Not assessed
MMR* Not assessed
Fully Vaccinated DTP + Polio

Only those immunisation services a child has received at the 4 year schedule point are included in the report.

Source: Australian Immunisation Register.

^{*} From 31 December 2017, the definition of fully immunised changed for the 60-<63 month age cohort, with MMR no longer being assessed from this date.

[†] From 30 September 2018, pneumococcal changed from dose 3 to dose 2 in the definition of fully immunised for the 12-<15 month cohort and pneumococcal dose 3 was included in the definition of fully immunised for the 24-<27 month cohort.

2 Assessment against the benchmarks

This chapter presents the assessment of each state and territory's performance against the NPEV benchmarks included in this period (being benchmarks 1, 2, 3, 4 and 5), and achievement of the milestone requirement. Summary tables containing data for each benchmark for all 8 jurisdictions are provided at Appendix B.

New South Wales

New South Wales met 4 of the 5 benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 4 was partly met, with increases in only 3 of the 4 nominated low coverage SA3 geographic areas.

Benchmark 1: Benchmark 1 was met, with a 0.54 percentage point increase in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.1.1).

Table 2.1.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, New South Wales, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	94.50	95.04	0.54	✓	YES

Notes

- This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.1.2).

Table 2.1.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, New South Wales, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	12-<15 months	94.14	94.64	0.50	✓	
	24-<27 months	90.80	92.90	2.10	✓	YES
	60-<63 months	97.02	97.70	0.68	✓	

Notes

- This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.1.3).

Table 2.1.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, New South Wales, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	Boys	65.07	82.20	17.14	✓	YES
	Girls	70.16	85.05	14.89	✓	YES

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was partly met, with increases in only 3 of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.1.4).

Table 2.1.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, New South Wales, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	Canada Bay	92.04	94.41	2.37	✓	
	Coffs Harbour	91.10	93.30	2.19	✓	DADTIV
	Eastern Suburbs – North	88.73	89.72	0.99	✓	PARTLY
	Tweed Valley	91.32	89.29	-2.02	×	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was met, with a wastage and leakage rate of less than 5% for previously assessed vaccines (Table 2.1.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.1.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, New South Wales, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
NSW	Previously assessed	3.19	3.57	0.38	✓	×	YES
	Newly assessed	10.00					IES

Notes

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rate is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- 5. The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: NSW achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

Victoria

Victoria met 4 of the 5 of the benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 4 was partly met, with increases in only 2 of the 4 nominated low coverage SA3 geographic areas.

Benchmark 1: Benchmark 1 was met, with an increase of 0.76 percentage points in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.2.1).

Table 2.2.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Victoria, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Vic.	95.43	96.18	0.76	√	YES

Notes

- 1. This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.2.2).

Table 2.2.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Victoria, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Vic.	12-<15 months	92.00	95.40	3.40	✓	
	24-<27 months	88.22	93.88	5.67	✓	YES
	60-<63 months	95.85	97.68	1.83	✓	

Notes

- This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.2.3).

Table 2.2.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Victoria, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Vic.	Boys	76.03	79.94	3.91	✓	VEC
	Girls	79.25	83.47	4.22	✓	YES

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was partly met, with increases in only 2 of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.2.4).

Table 2.2.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Victoria, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Vic.	Bayside	93.37	94.83	1.46	✓	
	Brunswick – Coburg	93.99	92.70	-1.29	×	DADTLY
	Port Phillip	90.28	92.49	2.21	✓	PARTLY
	Stonnington – West	89.32	88.62	-0.70	×	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was met, with a wastage and leakage rate of less than 5% for previously assessed vaccines (Table 2.2.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.2.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Victoria, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
Vic.	Previously assessed	5.69	4.67	1.02	✓	✓	YES
	Newly assessed	10.00					1 5

Notes

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- 5. The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: Victoria achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

Queensland

Queensland met all 5 benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 1: Benchmark 1 was met, with an increase of 0.30 percentage points in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.3.1).

Table 2.3.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Queensland, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Qld	94.42	94.72	0.30	✓	YES

Notes

- This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.3.2).

Table 2.3.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Queensland, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Qld	12-<15 months	91.86	93.64	1.78	✓	
	24-<27 months	88.77	91.77	3.00	✓	YES
	60-<63 months	96.73	97.10	0.37	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.3.3).

Table 2.3.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Queensland, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Qld	Boys	69.71	76.66	6.95	✓	VEC
	Girls	74.05	79.30	5.25	✓	YES

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was met, with increases in each of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.3.4).

Table 2.3.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Queensland, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Qld	Brisbane Inner – East	89.46	96.08	6.62	✓	
	Broadbeach – Burleigh	91.68	91.88	0.20	✓	YES
	Noosa	87.70	89.66	1.96	✓	150
	Nundah	92.32	94.47	2.15	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was met, with a wastage and leakage rate of less than 5% for previously assessed vaccines (Table 2.3.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.3.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Queensland, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
Qld	Previously assessed	5.29	4.81	-0.48	✓	✓	YES
	Newly assessed	10.00					163

Notes

- 1. This benchmark is deemed to have been met if, for *both* vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- 5. The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: Queensland achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

Western Australia

Western Australia met all 5 benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 1: Benchmark 1 was met, with an increase of 1.01 percentage points in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.4.1).

Table 2.4.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Western Australia, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
WA	93.18	94.18	1.01	✓	YES

Notes

- This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.4.2).

Table 2.4.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Western Australia, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
WA	12-<15 months	87.66	89.22	1.55	✓	
	24-<27 months	82.19	87.09	4.91	✓	YES
	60-<63 months	95.15	96.05	0.91	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.4.3).

Table 2.4.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Western Australia, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
WA	Boys	67.45	79.17	11.72	✓	YES
	Girls	69.23	80.50	11.27	✓	YES

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was met, with increases in each of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.4.4).

Table 2.4.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Western Australia, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
WA	Belmont – Victoria Park	91.29	92.35	1.06	✓	
	Kalamunda	92.51	93.70	1.19	✓	VEC
	Perth City	91.00	93.17	2.17	✓	YES
	South Perth	91.30	93.65	2.35	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was met, with a wastage and leakage rate of less than 5% for previously assessed vaccines (Table 2.4.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.4.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Western Australia, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
WA	Previously assessed	7.90	2.80	-5.10	✓	✓	YES
	Newly assessed	10.00					TES

Notes

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: WA achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

South Australia

South Australia met 4 of the 5 benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 4 was partly met, with increases in only 3 of the 4 nominated low coverage SA3 geographic areas.

Benchmark 1: Benchmark 1 was met, with an increase of 1.12 percentage points in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.5.1).

Table 2.5.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, South Australia, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
SA	94.48	95.60	1.12	✓	YES

Notes

- 1. This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.5.2).

Table 2.5.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, South Australia, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
SA	12-<15 months	89.51	91.30	1.78	✓	
	24-<27 months	86.34	88.97	2.64	✓	YES
	60-<63 months	95.31	97.00	1.69	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.5.3).

Table 2.5.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, South Australia, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
SA	Boys	61.21	76.51	15.31	✓	VEC
	Girls	65.34	79.04	13.70	✓	YES

Notes

- This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was partly met, with increases in only 3 of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.5.4).

Table 2.5.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, South Australia, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
SA	Adelaide City	83.96	87.23	3.27	✓	
	Burnside	93.45	93.39	-0.06	×	DADTIV
	Campbelltown (SA)	93.70	94.45	0.75	✓	PARTLY
	Unley	93.78	94.49	0.71	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was met, with a wastage and leakage rate of less than 5% for previously assessed vaccines (Table 2.5.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.5.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, South Australia, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
SA	Previously assessed	3.89	3.42	-0.47	✓	✓	YES
	Newly assessed	10.00					IES

Notes

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- 5. The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: SA achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

Tasmania

Tasmania met 3 of the 5 benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 1 was not met, with a decrease in the vaccination coverage rate for 60-<63 month olds.

Benchmark 4 was partly met, with increases in only 2 of the 4 nominated low coverage SA3 geographic areas.

Benchmark 1: Benchmark 1 was not met, with a decrease of 0.34 percentage points in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.6.1).

Table 2.6.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Tasmania, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Tas.	95.33	94.99	-0.34	×	NO

Notes

- This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.6.2).

Table 2.6.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Tasmania, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Tas.	12-<15 months	94.46	97.49	3.03	✓	
	24-<27 months	88.28	93.48	5.20	✓	YES
	60-<63 months	95.97	97.35	1.38	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.6.3).

Table 2.6.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Tasmania, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Tas.	Boys	69.71	75.05	5.34	✓	VEC
	Girls	73.28	79.29	6.01	✓	YES

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was partly met, with increases in only 2 of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.6.4).

Table 2.6.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Tasmania, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
Tas.	Devonport	93.25	94.25	1.00	✓	
	Launceston	94.80	95.13	0.33	✓	
	Meander Valley – West Tamar	91.81	91.71	-0.11	×	PARTLY
	North East	94.65	93.92	-0.73	×	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was met, with a wastage and leakage rate of less than 5% for previously assessed vaccines (Table 2.6.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.6.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Tasmania, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
Tas.	Previously assessed	8.44	-10.00*	-18.44	✓	✓	YES
	Newly assessed	10.00					TES

^{*} These results were less than zero when applying the methodology for calculation of performance against this Benchmark. Negative wastage and leakage results suggest that:

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: Tasmania achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

⁽a) more vaccines were administered in the reference period than were sent to vaccination providers in the reference period (i.e. existing doses in vaccination provider fridges at the start of the period may have contributed to the number of vaccines administered in the period in addition to doses sent to vaccination providers in the period); and/or

⁽b) the 3% adjustment factor applied in the methodology for calculation may overestimate the level of under-reporting of vaccinations to the AIR. Notes

Northern Territory

The Northern Territory met all 5 benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 1: Benchmark 1 was met, with an increase of 0.75 percentage points in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.7.1).

Table 2.7.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Northern Territory, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NT	93.91	94.66	0.75	✓	YES

Notes

- This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.7.2).

Table 2.7.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Northern Territory, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NT	12-<15 months	92.12	94.65	2.54	✓	
	24-<27 months	85.40	91.24	5.84	✓	YES
	60-<63 months	94.12	97.44	3.32	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.7.3).

Table 2.7.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Northern Territory, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NT	Boys	67.63	73.15	5.52	✓	VEC
	Girls	75.96	80.08	4.12	✓	YES

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was met, with increases in each of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.7.4).

Table 2.7.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Northern Territory, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NT	Alice Springs	93.53	95.02	1.49	✓	
	Daly - Tiwi - West Arnhem	94.50	98.33	3.83	✓	VEC
	Litchfield	94.67	96.67	2.00	✓	YES
	Palmerston	94.31	94.97	0.66	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was met, with a decrease of 3.43 percentage points from baseline for previously assessed vaccines (Table 2.7.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.7.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Northern Territory, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
NT	Previously assessed	11.11	7.68	-3.43	×	✓	YES
	Newly assessed	10.00					160

Notes

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- 5. The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: NT achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

Australian Capital Territory

The Australian Capital Territory met 3 of the 5 benchmarks assessed in this reference period, and achieved the milestone requirement.

Benchmark 4 was partly met, with increases in only 3 of the 4 nominated low coverage SA3 geographic areas.

Benchmark 5 was not met, with an increase in the wastage and leakage rate for previously assessed vaccines.

Benchmark 1: Benchmark 1 was met, with an increase of 0.80 percentage points in the vaccination coverage rate for 60–<63 month olds compared with the baseline (Table 2.8.1).

Table 2.8.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Australian Capital Territory, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
ACT	94.80	95.60	0.80	✓	YES

Notes

- This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 2: Benchmark 2 was met, with increases in the vaccination coverage rates for Aboriginal and Torres Strait Islander children in all 3 age cohorts compared with the baseline (Table 2.8.2).

Table 2.8.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Australian Capital Territory, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
ACT	12-<15 months	93.20	93.93	0.73	✓	
	24-<27 months	89.66	94.95	5.29	✓	YES
	60-<63 months	95.80	98.19	2.39	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 3: Benchmark 3 was met, with increases in the HPV vaccination rate for both boys and girls compared with the baseline (Table 2.8.3).

Table 2.8.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Australian Capital Territory, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
ACT	Boys	75.78	82.16	6.38	✓	YES
	Girls	78.10	85.22	7.12	✓	1 5

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved for both girls and boys, compared with the baseline of the average coverage rate over the previous 3 years.
- 2. The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.

Source: AIHW analysis of AIR data supplied by the Department of Health.

Benchmark 4: Benchmark 4 was partly met, with increases in only 3 of the 4 of the nominated low coverage SA3 geographic areas compared with the baseline (Table 2.8.4).

Table 2.8.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Australian Capital Territory, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
ACT	Belconnen	94.95	92.78	-2.17	×	
	North Canberra	93.99	95.54	1.54	✓	DADTIV
	South Canberra	91.36	96.41	5.04	✓	PARTLY
	Woden	93.72	93.88	0.16	✓	

Notes

- 1. This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.
- When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.
- 4. Change shown may not exactly equal difference between result and baseline due to rounding.

Benchmark 5: Benchmark 5 was not met, with an increase of 6.31 percentage points from baseline for previously assessed vaccines (Table 2.8.5). No new vaccines were included in the assessment for the 2020–21 reference period.

Table 2.8.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Australian Capital Territory, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	Result less than 5%	Decrease achieved	Benchmark met
ACT	Previously assessed	-0.44*	5.87	6.31	*	*	NO
	Newly assessed	10.00					NO

^{*} These results were less than zero when applying the methodology for calculation of performance against this Benchmark. Negative wastage and leakage results suggest that:

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- 5. The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

Milestone: ACT achieved the milestone requirement, with annual schools HPV immunisation data for the 2020 school year being provided by 30 April 2021.

⁽a) more vaccines were administered in the reference period than were sent to vaccination providers in the reference period (i.e. existing doses in vaccination provider fridges at the start of the period may have contributed to the number of vaccines administered in the period in addition to doses sent to vaccination providers in the period); and/or

⁽b) the 3% adjustment factor applied in the methodology for calculation may overestimate the level of under-reporting of vaccinations to the AIR. Notes

Appendix A: Detailed benchmark specifications

Table A1: Benchmark 1—An increase in vaccination coverage rates for 60–<63 month olds relative to the baseline

Measure	Change in the vaccination coverage rate for the 60–<63 month old cohort, calculated as the rate for the reference year minus the baseline rate.
Numerator	Number of children aged 60–<63 months in the reference period who are recorded as 'fully vaccinated' on the Australian Immunisation Register (AIR) in the reference period.
Denominator	Number of children aged 60–<63 months in the reference period who are registered on the AIR.
Calculation of assessment year rate	100 x (numerator ÷ denominator)
Calculation of baseline rate	For each reference period, the baseline is the average coverage rate for the previous 3 years, calculated as the sum of the coverage rates for the previous 3 years, divided by 3.
Reference period	12 months from 1 April to 31 March
Assessment criteria	This benchmark will be deemed to have been met if there is an increase in the coverage rate compared with the baseline.
	Where a state or territory has achieved a coverage rate of 95% or greater, they will only be required to maintain a coverage rate of at least 95%.
Data source and considerations	Data are sourced from the AIR.
	Baseline coverage is calculated using data for the period 1 April to 31 March and processed at 31 March.
	A 3-month lag period is observed in the coverage assessment to allow for late notifications of immunisation to the AIR.
	Data used for the coverage assessment are for the period 1 April to 31 March and processed at 30 June.
Other considerations	Should the definition of 'fully immunised' change, the baseline may be reset following an independent review by an external body.
	As at 1 April 2020, 'fully immunised' at 60 months of age is defined as a child having a record on the AIR of dose 4 or 5 of a diphtheria (D), tetanus (T) and pertussis (P)-containing vaccine; and dose 4 of a polio containing vaccine. Note that from 31 December 2017, the definition of 'fully immunised' at 60-<63 months of age changed, with MMR no longer being assessed.
	Where a new vaccine or program has been implemented within a reporting period, States may request a reanalysis of the data, further extending the allowable lag period by an additional three months.

Table A2: Benchmark 2—An increase in vaccination coverage rates for Aboriginal and Torres Strait Islander people in at least 2 of the following 3 cohorts, relative to the baseline: 12–<15 months; 24–<27 months; and 60–<63 months

Measure	Change in the vaccination coverage rate for each cohort, calculated as the rate for the reference year minus the baseline rate.
	Age cohorts for this benchmark are 12–<15 months, 24–<27 months and 60–<63 months.
Numerator	Number of children in the relevant age cohort in the reference period who are recorded as 'fully vaccinated' on the Australian Immunisation Register (AIR) in the reference period.
Denominator	Number of children in the relevant age cohort in the reference period who are registered on the AIR.
Calculation of assessment year rate	100 x (numerator ÷ denominator), for each age cohort
Calculation of baseline rate	For each reference period, the baseline is the lowest coverage rate from the previous 3 years, for the relevant age cohort.
Reference period	12 months from 1 April to 31 March
Assessment criteria	 This benchmark will be deemed to have been met if there is an increase in the coverage rate compared with the baseline for at least 2 of the 3 age cohorts. Where a state or territory has achieved a coverage rate of 95% or greater for an age cohort, they will only be required to maintain a coverage rate of at
	least 95% for that cohort.
Data source and considerations	Data are sourced from the AIR.
	Baseline coverage is calculated using data for the period 1 April to 31 March and processed at 31 March.
	A 3-month lag period is observed in the coverage assessment to allow for late notifications of immunisation to the AIR.
	Data used for the coverage assessment are for the period 1 April to 31 March and processed at 30 June.
Other considerations	 Should the definition of 'fully immunised' change, the baseline may be reset following an independent review by an external body. As at 1 April 2020:
	'fully immunised' at 12 months of age is defined as a child having a record on the AIR of dose 3 of a DTP-containing vaccine; dose 3 of polio vaccine; dose 2 or 3 Haemophilus influenzae type b (Hib) containing vaccine depending on pathway; dose 3 of hepatitis B (hepB) vaccine; and dose 3 of 13-valent pneumococcal conjugate vaccine (13vPCV).
	o 'fully immunised' at 24 months of age is defined as a child having a record on the AIR of dose 4 of a DTP-containing vaccine; dose 3 of polio vaccine; dose 3 or 4 of Hib containing vaccine depending on pathway; dose 3 of hepatitis B vaccine; dose 2 of a measles, mumps and rubella-containing (MMR) vaccine; dose 1 of meningococcal C (MenC) vaccine; and dose 1 of varicella vaccine.
	'fully immunised' at 60 months of age is defined as a child having a record on the AIR of dose 4 or 5 of a DTP-containing vaccine; and dose 4 of a polio containing vaccine. Note that from 31 December 2017, the definition of 'fully immunised' at 60-<63 months of age changed, with MMR no longer being assessed.
	Where a new vaccine or program has been implemented within a reporting period, States may request a reanalysis of the data, further extending the allowable lag period by an additional three months.

Table A3: Benchmark 3—An increase in the vaccination coverage rates for both adolescent boys and adolescent girls for HPV, relative to the baseline

Measure	Change in the HPV vaccination coverage rate for adolescent girls and for adolescent boys, calculated as the rate for the reference year minus the baseline rate.
Numerator	For boys and for girls, the number of adolescents aged 15 years in the reference period who are recorded as 'fully vaccinated' for HPV on the Australian Immunisation Register (AIR) in the reference period.
Denominator	For boys and for girls, the number of adolescents aged 15 years in the reference period who are registered on the AIR.
Calculation of assessment year rate	100 x (numerator ÷ denominator), for boys and for girls.
Calculation of baseline rate	For each reference period, the baseline is the average coverage rate for the previous three years.
Reference period	12 months from 1 January to 31 December
Assessment criteria	This benchmark will be deemed to have been fully met if there is an increase in the coverage rate compared with the baseline for both boys and girls.
	The benchmark will be deemed to have been partly met if there is an increase in the coverage rate compared with the baseline for either boys or girls.
Data source and considerations	Data are sourced from the AIR.
	Baseline coverage is calculated using data for the period 1 January to 31 December and processed at 31 March.
	A 3-month lag period is observed in the coverage assessment to allow for late notifications of immunisation to the AIR.
	 Data used for the coverage assessment are for the period 1 January to 31 December and processed at 31 March.
Other considerations	Should the definition of 'fully immunised' change, the baseline may be reset following an independent review by an external body.
	 As at 1 April 2020, 'fully immunised' for HPV is defined as a child having a record on the AIR of either 2 or 3 doses (depending on age) of HPV- containing vaccine.
	Where a new vaccine or program has been implemented within a reporting period, States may request a reanalysis of the data, further extending the allowable lag period by an additional three months.

Table A4: Benchmark 4—An increase in vaccination coverage rates for 60–<63 month olds in 4 of the 10 lowest vaccination coverage SA3 geographical areas, relative to the baseline

Measure	 Change in the vaccination coverage rate for the 60–<63 month old cohort in each selected SA3 geographic area, calculated as the rate for the reference year minus the baseline rate. Jurisdictions will notify the Commonwealth by August of each reference year of the 4 nominated SA3 geographic areas to be targeted.
Numerator	For each SA3 geographic area, the number of resident children aged 60–<63 months in the reference period who are recorded as 'fully vaccinated' on the Australian Immunisation Register (AIR) in the reference period.
Denominator	For each geographic area, the number of resident children aged 60–<63 months in the reference period who are registered on the AIR.
Calculation of assessment year rate	100 x (numerator ÷ denominator), for each geographic area.
Calculation of baseline rate	For each reference period, the baseline is the coverage rate for the previous 12 month period.
Reference period	12 months from 1 April to 31 March
Assessment criteria	This benchmark will be deemed to have been fully met if there is an increase in the coverage rate compared with the baseline for all of the selected geographic areas.
	The benchmark will be deemed to have been partly met if there is an increase in the coverage rate compared with the baseline for some of the selected geographic areas.
	Where a state or territory has achieved a coverage rate of at least 95% in all SA3 geographical areas, this benchmark is deemed to have been met.
Data source and considerations	Data are sourced from the AIR.
	Baseline coverage is calculated using data for the period 1 April to 31 March and processed at 31 March.
	A 3-month lag period is observed in the coverage assessment to allow for late notifications of immunisation to the AIR.
	Data used for the coverage assessment are for the period 1 April to 31 March and processed at 30 June.
Other considerations	For the purposes of this benchmark, a geographic area of low coverage is included if it is in the 10 lowest SA3 geographic areas with coverage below 95% in the relevant jurisdiction.
	Should the definition of 'fully immunised' change, the baseline may be reset following an independent review by an external body.
	As at 1 April 2020, 'fully immunised' at 60 months of age is defined as a child having a record on the AIR of dose 4 or 5 of a DTP-containing vaccine; and dose 4 of a polio containing vaccine. Note that from 31 December 2017, the definition of 'fully immunised' at 60-<63 months of age changed, with MMR no longer being assessed.
	Where a new vaccine or program has been implemented within a reporting period, States may request a reanalysis of the data, further extending the allowable lag period by an additional three months.

Table A5: Benchmark 5—An annual decrease in the wastage and leakage rate for agreed vaccines, relative to the baseline

Measure	Change in the wastage and leakage rate for NIP vaccines provided to children, calculated as the rate for the reference year minus the baseline rate.
Numerator	Number of NIP vaccines lost to wastage and leakage in the reference period, calculated as A – (B x 1.03) – C where:
	A = number of vaccines distributed to providers in the reference period
	B = number of vaccines reported as given to children under 10 years of age during the reference period
	C = number of vaccines reported as wasted due to unavoidable circumstances during the reference period
Denominator	Number of vaccines distributed to providers in the reference period.
Calculation of assessment year rate	100 x (numerator ÷ denominator)
Calculation of baseline rate	For each reference period, the baseline is the wastage and leakage rate for the previous 12 month period, or 5%, whichever is greater.
	For newly introduced vaccines, a baseline of 10% will be applied.
Reference period	12 months from 1 April to 31 March
Assessment criteria	This benchmark will be deemed to have been met if there is a decrease in the wastage and leakage rate compared with the baseline.
	Where a state or territory has achieved a wastage and leakage rate of 5% or lower, this benchmark will be deemed to have been met.
Data source and considerations	Data are sourced from States and Territories and from the Australian Immunisation Register (AIR).
	Baseline coverage is calculated using data for the period 1 April to 31 March and processed at 31 March.
	A 3-month lag period is observed in the assessment to allow for late notifications of immunisation to the AIR.
	Data used for the coverage assessment are for the period 1 April to 31 March and processed at 30 June.
Other considerations	The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR.
	The wastage and leakage calculation discounts vaccines lost due to uncontrollable events such as natural disasters, power outages or refrigeration failures. States must provide reports that outline any known wastage that has occurred due to such events.
	Where a new vaccine is added to the NIP for children only, a baseline of 10% wastage and leakage will be applied.
	Where a new vaccine or program has been implemented within a reporting period, States may request a reanalysis of the data, further extending the allowable lag period by an additional three months.
	The following vaccines are in scope of the fourth year of assessment:
	ActHIB (Hib) – previously assessed
	 Infanrix Hexa (DTPa-hepB-IPV-Hib) – previously assessed
	o Infanrix (DTPa) – previously assessed
	o Tripacel (DTPa) – previously assessed
	ProQuad (MMRV) – previously assessed
	Priorix-Tetra (MMRV) – previously assessed Priorix-IDV (DTD-IDV) – previously assessed
	o Infanrix IPV (DTPa-IPV) – previously assessed
	Quadracel (DTPa-IPV) – previously assessed Peterix (Peterixina) – previously assessed
	o Rotarix (Rotavirus) – previously assessed
	Vaqta Paediatric (HepA) – previously assessed (NT, Qld, SA, WA only) Note that data on Previously assessed from the year Assessment.
	Note that data on Prevenar 13 were excluded from the year 4 assessment due to a policy change which affected results for this antigen.

Appendix B: Summary of performance assessment data, by benchmark

Table B1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, by state and territory, 2020–21

Jurisdiction	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	94.50	95.04	0.54	✓	YES
Vic.	95.43	96.18	0.76	✓	YES
Qld	94.42	94.72	0.30	✓	YES
WA	93.18	94.18	1.01	✓	YES
SA	94.48	95.60	1.12	✓	YES
Tas.	95.33	94.99	-0.34	*	NO
NT	93.91	94.66	0.75	✓	YES
ACT	94.80	95.60	0.80	✓	YES

Notes

^{1.} This benchmark is deemed to have been met if an increase in the coverage rate is achieved, compared with the baseline of the average coverage rate over the previous 3 years.

^{2.} The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.

^{3.} Change shown may not exactly equal difference between result and baseline due to rounding.

Table B2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, by state and territory, 2020–21

Jurisdiction	Cohort	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	12-<15 months	94.14	94.64	0.50	✓	
	24-<27 months	90.80	92.90	2.10	✓	YES
	60-<63 months	97.02	97.70	0.68	✓	
Vic.	12-<15 months	92.00	95.40	3.40	✓	
	24-<27 months	88.22	93.88	5.67	✓	YES
	60-<63 months	95.85	97.68	1.83	✓	
Qld	12-<15 months	91.86	93.64	1.78	✓	
	24-<27 months	88.77	91.77	3.00	✓	YES
	60-<63 months	96.73	97.10	0.37	✓	
WA	12-<15 months	87.66	89.22	1.55	✓	
	24-<27 months	82.19	87.09	4.91	✓	YES
	60-<63 months	95.15	96.05	0.91	✓	
SA	12-<15 months	89.51	91.30	1.78	✓	
	24-<27 months	86.34	88.97	2.64	✓	YES
	60-<63 months	95.31	97.00	1.69	✓	
Tas.	12-<15 months	94.46	97.49	3.03	✓	
	24-<27 months	88.28	93.48	5.20	✓	YES
	60-<63 months	95.97	97.35	1.38	✓	
NT	12-<15 months	92.12	94.65	2.54	✓	
	24-<27 months	85.40	91.24	5.84	✓	YES
	60-<63 months	94.12	97.44	3.32	✓	
ACT	12-<15 months	93.20	93.93	0.73	✓	
	24-<27 months	89.66	94.95	5.29	✓	YES
	60-<63 months	95.80	98.19	2.39	✓	

Notes

^{1.} This benchmark is deemed to have been met if increases in coverage are achieved in at least 2 of the 3 age cohorts, compared with the baseline of the lowest coverage rate from the previous 3 years.

^{2.} The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.

^{3.} Change shown may not exactly equal difference between result and baseline due to rounding.

Table B3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, by state and territory, 2020

Jurisdiction	Sex	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	Boys	65.07	82.20	17.14	✓	VE0.
	Girls	70.16	85.05	14.89	✓	YES
Vic.	Boys	76.03	79.94	3.91	✓	VE0.
	Girls	79.25	83.47	4.22	✓	YES
Qld	Boys	69.71	76.66	6.95	✓	\/=o
	Girls	74.05	79.30	5.25	✓	YES
WA	Boys	67.45	79.17	11.72	✓	YES
	Girls	69.23	80.50	11.27	✓	
SA	Boys	61.21	76.51	15.31	✓	\/=o
	Girls	65.34	79.04	13.70	✓	YES
Tas.	Boys	69.71	75.05	5.34	✓	
	Girls	73.28	79.29	6.01	✓	YES
NT	Boys	67.63	73.15	5.52	✓	V=0
	Girls	75.96	80.08	4.12	✓	YES
ACT	Boys	75.78	82.16	6.38	✓	\/=o
	Girls	78.10	85.22	7.12	✓	YES

Notes

^{1.} This benchmark is deemed to have been met if increases in coverage are achieved for both boys and girls, compared with the baseline of the average coverage rate over the previous 3 years.

^{2.} The reference period for this benchmark is 1 January 2020 to 31 December 2020, with data processed at 31 March 2021.

^{3.} Change shown may not exactly equal difference between result and baseline due to rounding.

Table B4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, 2020–21

Jurisdiction	SA3	Baseline (%)	Result (%)	Change (percentage points)	Increase achieved	Benchmark met
NSW	Canada Bay	92.04	94.41	2.37	✓	
	Coffs Harbour	91.10	93.30	2.19	✓	
	Eastern Suburbs – North	88.73	89.72	0.99	✓	PARTLY
	Tweed Valley	91.31	89.29	-2.02	×	
Vic.	Bayside	93.37	94.83	1.46	✓	
	Brunswick – Coburg	93.99	92.70	-1.29	×	
	Port Phillip	90.28	92.49	2.21	✓	PARTLY
	Stonnington – West	89.32	88.62	-0.70	×	
Qld	Brisbane Inner – East	89.46	96.08	6.62	✓	
	Broadbeach – Burleigh	91.68	91.88	0.20	✓	
	Noosa	87.70	89.66	1.96	✓	YES
	Nundah	92.32	94.47	2.15	✓	
WA	Belmont – Victoria Park	91.29	92.35	1.06	✓	
	Kalamunda	92.51	93.70	1.19	✓	YES
	Perth City	91.00	93.17	2.17	✓	
	South Perth	91.30	93.65	2.35	✓	
SA	Adelaide City	83.96	87.23	3.27	✓	
	Burnside	93.45	93.39	-0.06	×	
	Campbelltown (SA)	93.70	94.45	0.75	✓	PARTLY
	Unley	93.78	94.49	0.71	✓	
Tas.	Devonport	93.25	94.25	1.00	✓	
	Launceston	94.80	95.13	0.33	✓	
	Meander Valley – West Tamar	91.81	91.71	-0.11	×	PARTLY
	North East	94.65	93.92	-0.73	×	
NT	Alice Springs	93.53	95.02	1.49	✓	
	Daly – Tiwi – West Arnhem	94.50	98.33	3.83	✓	
	Litchfield	94.67	96.67	2.00	✓	YES
	Palmerston	94.31	94.97	0.66	✓	
ACT	Belconnen	94.95	92.78	-2.17	×	
	North Canberra	93.99	95.54	1.54	✓	PARTLY
	South Canberra	91.36	96.41	5.04	✓	
	Woden	93.72	93.88	0.16	✓	

Notes

^{1.} This benchmark is deemed to have been met if increases in coverage are achieved in all 4 selected SA3s, compared with the baseline of the coverage rate over the previous 12 months.

^{2.} The reference period for this benchmark is 1 April 2020 to 31 March 2021, with data processed at 30 June 2021.

When assessing coverage of geographic areas with low numbers of children, small changes in the number of children being counted can impact coverage rates.

^{4.} Change shown may not exactly equal difference between result and baseline due to rounding.

Table B5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, by state and territory, 2020–21

Jurisdiction	Vaccine status	Baseline (%)	Result (%)	Change (percentage points)	2020–21 result less than 5%	Decrease achieved	Benchmark met
NSW	Previously assessed	3.19	3.57	0.38	✓	×	VEO
	Newly assessed	10.00					YES
Vic.	Previously assessed	5.69	4.67	1.02	✓	✓	VEO
	Newly assessed	10.00					YES
Qld	Previously assessed	5.29	4.81	-0.48	✓	✓	VE0
	Newly assessed	10.00					YES
WA	Previously assessed	7.90	2.80	-5.10	✓	✓	\/F0
	Newly assessed	10.00					YES
SA	Previously assessed	3.89	3.42	-0.47	✓	✓	\/=0
	Newly assessed	10.00					YES
Tas.	Previously assessed	8.44	-10.00*	-18.44	✓	✓	
	Newly assessed	10.00					YES
NT	Previously assessed	11.11	7.68	-3.43	×	✓	\/=0
	Newly assessed	10.00					YES
ACT	Previously assessed	-0.44*	5.87	6.31	×	×	
	Newly assessed	10.00					NO

^{*} The baseline results were less than zero when applying the methodology for calculation of performance against this Benchmark. Negative wastage and leakage results suggest that:

(b) the 3% adjustment factor applied in the methodology for calculation may overestimate the level of under-reporting of vaccinations to the AIR. Notes

- This benchmark is deemed to have been met if, for both vaccine status categories, a decrease in the wastage and leakage rate is achieved, compared with the baseline of the wastage and leakage rate for the previous 12-month period (or 10% for newly assessed vaccines), or if the wastage and leakage rates is less than 5%. No newly assessed vaccines were included in the assessment for the 2020–21 reference period.
- 2. The reference period for this benchmark is 1 April 2020 to 31 March 2021, with AIR data processed at 30 June 2021.
- 3. Change shown may not exactly equal difference between result and baseline due to rounding.
- 4. Both baseline and year 4 results exclude data for the Prevenar 13 antigen.
- 5. The wastage and leakage calculation includes an adjustment factor of 3% to account for under-reporting of immunisations to the AIR. Refer to Appendix Table A5 for details.

Source: AIHW analysis of wastage and leakage data supplied by the states and territories, and AIR data supplied by the Department of Health.

⁽a) more vaccines were administered in the reference period than were sent to vaccination providers in the reference period (i.e. existing doses in vaccination provider fridges at the start of the period may have contributed to the number of vaccines administered in the period in addition to doses sent to vaccination providers in the period); and/or

Abbreviations

ACT Australian Capital Territory

AIHW Australian Institute of Health and Welfare

AIR Australian Immunisation Register

DTP diphtheria—tetanus—pertussis

HepB hepatitis B

HIB haemophilus influenzae type b

HPV human papillomavirus

MenC meningococcal serogroup C

MMR measles—mumps—rubella

NIP National Immunisation Program

NPEV National Partnership on Essential Vaccines

NSW New South Wales

NT Northern Territory

PB performance benchmark

Pneumo pneumococcal

Qld Queensland

SA South Australia

SA3 Statistical Area 3 as per Australian Statistical Geography Standard 2011

Tas. Tasmania

Vic. Victoria

WA Western Australia

Symbols

Symbol Definition
. . (2 spaced full stops) no data/insufficient data

- (minus) negative or minus values

< less than

List of tables

Table S1: Achievement against NPEV benchmarks assessed for the period 1 April 2020 to 31 March 2021, by state and territoryiv
Table 1: Definition of 'fully immunised' by age cohort, as at 1 April 20204
Table 2.1.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, New South Wales, 2020–21
Table 2.1.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, New South Wales, 2020–215
Table 2.1.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, New South Wales, 2020
Table 2.1.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, New South Wales, 2020–21
Table 2.1.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, New South Wales, 2020–21
Table 2.2.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Victoria, 2020–21
Table 2.2.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Victoria, 2020–21
Table 2.2.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Victoria, 2020
Table 2.2.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Victoria, 2020–21
Table 2.2.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Victoria, 2020–21
Table 2.3.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Queensland, 2020–21
Table 2.3.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Queensland, 2020–21
Table 2.3.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Queensland, 2020
Table 2.3.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Queensland, 2020–21
Table 2.3.5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Queensland, 2020–21
Table 2.4.1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Western Australia, 2020–21
Table 2.4.2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Western Australia, 2020–21 14
Table 2.4.3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Western Australia, 2020
Table 2.4.4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas. Western Australia, 2020–21, 15

Table 2.4.5:	Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Western Australia, 2020–21	16
Table 2.5.1:	Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, South Australia, 2020–21	17
Table 2.5.2:	Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, South Australia, 2020–21	17
Table 2.5.3:	Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, South Australia, 2020	18
Table 2.5.4:	Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, South Australia, 2020–21	18
Table 2.5.5:	Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, South Australia, 2020–21	19
Table 2.6.1:	Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Tasmania, 2020–21	20
Table 2.6.2:	Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Tasmania, 2020–21	20
Table 2.6.3:	Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Tasmania, 2020	21
Table 2.6.4:	Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Tasmania, 2020–21	21
Table 2.6.5:	Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Tasmania, 2020–21	22
Table 2.7.1:	Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Northern Territory, 2020–21	23
Table 2.7.2:	Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Northern Territory, 2020–21	23
Table 2.7.3:	Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Northern Territory, 2020	24
Table 2.7.4:	Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Northern Territory, 2020–21	24
Table 2.7.5:	Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Northern Territory, 2020–21	25
Table 2.8.1:	Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, Australian Capital Territory, 2020–21	26
Table 2.8.2:	Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, Australian Capital Territory, 2020–21	26
Table 2.8.3:	Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, Australian Capital Territory, 2020	27
Table 2.8.4:	Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, Australian Capital Territory, 2020–21	27
Table 2.8.5:	Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, Australian Capital Territory, 2020–21	28

Table A1: Benchmark 1—An increase in vaccination coverage rates for 60–<63 month olds relative to the baseline	29
Table A2: Benchmark 2—An increase in vaccination coverage rates for Aboriginal and Torres Strait Islander people in at least 2 of the following 3 cohorts, relative to the baseline: 12–<15 months; 24–<27 months; and 60–<63 months	30
Table A3: Benchmark 3—An increase in the vaccination coverage rates for both adolescent boys and adolescent girls for HPV, relative to the baseline	31
Table A4: Benchmark 4—An increase in vaccination coverage rates for 60–<63 month olds in 4 of the 10 lowest vaccination coverage SA3 geographical areas, relative to the baseline	32
Table A5: Benchmark 5—An annual decrease in the wastage and leakage rate for agreed vaccines, relative to the baseline	33
Table B1: Assessment against NPEV Benchmark 1—increasing vaccination coverage for 60–<63 month olds, by state and territory, 2020–21	34
Table B2: Assessment against NPEV Benchmark 2—increasing vaccination coverage for Aboriginal and Torres Strait Islander people, by state and territory, 2020–21	35
Table B3: Assessment against NPEV Benchmark 3—increasing HPV vaccination coverage for adolescent boys and girls, by state and territory, 2020	36
Table B4: Assessment against NPEV Benchmark 4—increasing vaccination coverage for 60–<63 month olds in low coverage areas, 2020–21	37
Table B5: Assessment against NPEV Benchmark 5—decreasing wastage and leakage rates, by state and territory, 2020–21	38

Related publications

This report, *National Partnership Agreement on Essential Vaccines: performance report 2020–21*, is part of an annual series. The earlier editions and any published subsequently can be downloaded for free from the AIHW website https://www.aihw.gov.au/reports-data/health-welfare-services/immunisation/reports. The website also includes information on ordering printed copies.

The following AIHW publications relating to immunisation might also be of interest:

- AIHW 2018. Immunisation rates for children in 2016–17. Cat. no. HPF 16. Canberra: AIHW.
- AIHW 2018. HPV immunisation rates in 2015–16. Cat. no. HPF 17. Canberra: AIHW.
- AIHW 2018. Vaccine-preventable diseases (fact sheet set). Cat. no. PHE 236. Canberra: AIHW.
- AIHW 2019. The burden of vaccine preventable diseases in Australia. Cat. no. PHE 263.
 Canberra: AIHW.



This report provides an assessment of state and territory performance against the performance benchmarks outlined in the National Partnership on Essential Vaccines, for the assessment period 1 April 2020 to 31 March 2021. The report shows that 3 jurisdictions met all benchmarks assessed in this period, with the remaining jurisdictions each not meeting or only partly meeting at least one benchmark.

aihw.gov.au



improved health and welfare

