

# AUSTRALIAN CHILDHOOD IMMUNISATION COVERAGE, ASSESSED AS AT 31 MARCH 2015

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## Introduction

The National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS) provides commentary on the trends in ACIR data. For further information please contact NCIRS at: telephone +61 2 9845 1435, email: brynley.hull@health.nsw.gov.au

Tables 1, 2 and 3 provide the latest quarterly report on childhood immunisation coverage from the Australian Childhood Immunisation Register (ACIR) for all children.

The data show the percentage of all children 'fully immunised' at 12 months, 24 months and 60 months, for four 3-month birth cohorts of children assessed at the stated ages between January and December 2014 using ACIR data as at 31 March 2015. 'Fully immunised' refers to vaccines on the National Immunisation Program Schedule, but excludes rotavirus, and is outlined in more detail below.

'Fully immunised' at 12 months of age is defined as a child having a record on the ACIR of three doses of a diphtheria (D), tetanus (T) and pertussis-containing (P) vaccine, 3 doses of polio vaccine, 2 or 3 doses of PRP-OMP containing *Haemophilus influenzae* type b (Hib) vaccine or 3 doses of any other *Haemophilus influenzae* type b (Hib) vaccine, 3 doses of hepatitis B vaccine, and 3 doses of 13-valent pneumococcal conjugate vaccine. 'Fully immunised' at 24 months of age is defined as a child having a record on the ACIR of 3 doses of a

DTP-containing vaccine, 3 doses of polio vaccine, 3 or 4 doses of PRP-OMP Hib vaccine or 4 doses of any other Hib vaccine, 3 doses of hepatitis B vaccine, 1 dose of a measles, mumps and rubella-containing (MMR) vaccine, 1 dose of meningococcal C vaccine, and 1 dose of varicella vaccine. 'Fully immunised' at 60 months of age is defined as a child having a record on the ACIR of 4 doses of a DTP-containing vaccine, 4 doses of polio vaccine, and 2 doses of an MMR-containing vaccine.

A full description of the basic methodology used can be found in *Commun Dis Intell* 1998;22(3):36–37.

## Results

The rolling annualised percentage of children 'fully immunised' by 12 months of age for Australia increased marginally from the previous quarter by 0.3 of a percentage point to 91.0% (Table 1). All jurisdictions experienced small increases in the percentage of children 'fully immunised' by 12 months of age. For individual vaccines due by 12 months of age all jurisdictions achieved coverage greater than 90%.

The rolling annualised percentage of children 'fully immunised' by 24 months of age for Australia decreased from the previous quarter by 1.1 percentage points to 90.1 (Table 2) This drop is likely to be due to the inclusion of the meningococcal C and varicella vaccines into the algorithm to calculate fully immunised coverage for this age group from the December 2014 quarter onwards. All jurisdictions experienced similar decreases

**Table 1: Percentage of children immunised at 12 months of age, preliminary results by vaccine and state or territory for the birth cohort 1 January 2013 to 31 December 2013**

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	5,598	98,764	3,860	62,691	19,857	5,967	75,919	34,050	306,706
Diphtheria, tetanus, pertussis (%)	93.9	91.4	90.5	92.3	91.4	91.2	92.0	92.1	91.8
Poliomyelitis (%)	93.9	91.3	90.5	92.3	91.4	91.1	92.0	92.1	91.8
<i>Haemophilus influenzae</i> type b (%)	93.6	91.2	90.4	92.2	91.3	91.0	91.8	91.9	91.7
Hepatitis B (%)	93.5	91.0	90.4	92.1	91.2	90.9	91.6	91.7	91.5
Pneumococcal	93.7	91.0	90.5	92.1	91.1	91.0	91.6	91.6	91.5
Fully immunised (%)	93.0	90.5	90.0	91.8	90.7	90.4	91.0	91.1	91.0

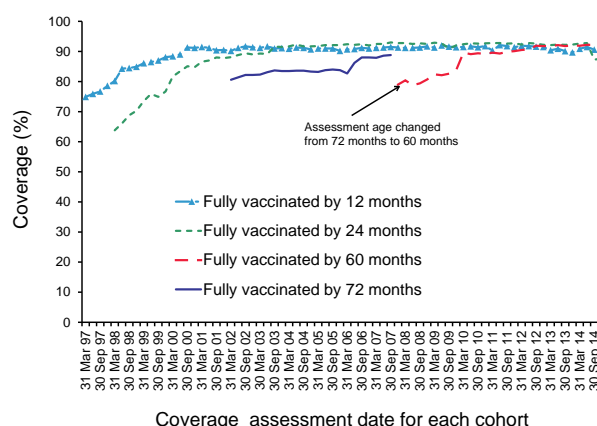
in fully immunised coverage for this age group. Coverage for individual vaccines due by 24 months remained high in all jurisdictions, except that coverage in all jurisdictions again decreased for the measles, mumps and rubella vaccine (by 0.7 to 1.3 percentage points). This is likely due to the introduction of the MMRV vaccine onto the National Immunisation Program Schedule in July 2013.

The rolling annualised percentage of children ‘fully immunised’ by 60 months of age for Australia increased marginally from the previous quarter by 0.1 of a percentage point to 92.2% (Table 3). This maintains the improvement in coverage for this age milestone. There were also only marginal changes in fully immunised coverage at 60 months of age in all jurisdictions. Coverage for individual vaccines due by 60 months remained greater than 90% in all jurisdictions.

### Acknowledgment

These data were provided by Medicare Australia, to specifications provided by the Australian Government Department of Health.

**Figure: Trends in vaccination coverage, Australia, 1997 to 31 December 2014, by age cohorts**



**Table 2: Percentage of children immunised at 24 months of age, preliminary results by vaccine and state or territory for the birth cohort 1 January 2012 to 31 December 2012**

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	5,544	101,638	3,668	63,503	20,163	5,892	76,780	34,257	311,445
Diphtheria, tetanus, pertussis (%)	96.0	94.9	95.3	95.0	94.7	95.1	95.5	94.5	95.0
Poliomyelitis (%)	96.0	94.8	95.3	95.0	94.7	95.0	95.4	94.5	95.0
<i>Haemophilus influenzae</i> type b (%)	94.9	93.5	94.9	94.2	93.4	93.5	94.2	93.3	93.8
Measles, mumps, rubella (%)	93.8	91.9	93.3	92.7	91.5	91.3	92.3	90.7	92.0
Hepatitis B (%)	95.6	94.5	95.3	94.6	94.3	94.8	95.0	93.9	94.6
Meningococcal C (%)	94.4	93.1	94.0	93.9	92.9	93.2	93.6	92.7	93.4
Varicella (%)	94.2	90.8	90.6	91.4	90.0	88.6	91.6	89.5	91.0
Fully immunised (%)	92.1	89.6	90.9	91.3	89.4	88.7	90.4	88.8	90.1

**Table 3: Percentage of children immunised at 60 months of age, preliminary results by vaccine and state or territory for the birth cohort 1 January 2009 to 31 December 2009**

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	5,382	100,561	3,559	64,904	20,337	6,418	75,318	33,956	310,435
Diphtheria, tetanus, pertussis (%)	94.1	93.1	92.8	92.8	91.5	92.9	93.1	91.2	92.7
Poliomyelitis (%)	94.1	93.0	92.8	92.7	91.4	92.9	93.0	91.1	92.7
Measles, mumps, rubella (%)	93.8	93.0	93.2	92.7	91.4	92.8	93.0	91.0	92.6
Fully immunised (%)	93.5	92.5	92.2	92.3	90.8	92.2	92.5	90.5	92.2