

AUSTRALIAN CHILDHOOD IMMUNISATION COVERAGE, 1 JANUARY TO 31 MARCH COHORT, ASSESSED AS AT 30 JUNE 2013

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Introduction

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

The data show the percentage of children 'fully immunised' at 12 months, 24 months and 60 months, for 3-month birth cohorts of children at the stated ages between 1 January and 31 March 2013. 'Fully immunised' refers to vaccines on the National Immunisation Program Schedule, but excludes rotavirus, pneumococcal conjugate, varicella, and meningococcal C conjugate vaccines, 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 Hib vaccine, and 2 or 3 doses of Comvax hepatitis B vaccine or 3 doses of all other hepatitis B vaccines. 'Fully immunised' at 24 months of age is defined as a child having a record on the ACIR of 3 or 4 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 or 4 doses of Comvax hepatitis B vaccine or 4 doses of all other hepatitis B vaccines, and 1 dose of a measles, mumps and rubella-containing (MMR) vaccine.

'Fully immunised' at 60 months of age is defined as a child having a record on the ACIR of 4 or 5 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.

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

Results

The percentage of children 'fully immunised' by 12 months of age for Australia decreased from the previous quarter by 1.1 percentage points to 90.4% (Table 1). Except for the 2 territories, all jurisdictions experienced decreases in coverage for all individual vaccines due at 12 months of age, ranging from -0.7 of a percentage point to -1.7 percentage points. This decrease was likely due to the cessation of an ACIR mail-out to parents in late 2012. Prior to December 2012, the ACIR conducted a mail-out every quarter to parents of children who are identified as not up-to-date at 9 months of age according to ACIR records. The children targeted are those who would have been assessed against the 12–15 month age cohort for the following coverage quarter.

Table 1. Percentage of children immunised at 12 months of age for the birth cohort 1 January to 31 March 2012, preliminary results, by disease and state or territory; assessment date 30 June 2013

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,370	25,059	1,022	16,094	4,976	1,484	18,790	8,536	77,331
Diphtheria, tetanus, pertussis (%)	94.4	90.4	91.7	91.8	91.0	91.1	91.4	90.6	91.1
Poliomyelitis (%)	94.3	90.3	91.7	91.7	90.9	91.1	91.3	90.6	91.0
<i>Haemophilus influenzae</i> type b (%)	94.0	90.0	91.6	91.6	90.5	91.0	91.0	90.4	90.8
Hepatitis B (%)	93.9	90.0	91.5	91.5	90.4	91.1	90.8	90.0	90.6
Fully immunised (%)	93.4	89.7	91.4	91.4	90.2	91.0	90.5	89.8	90.4
Change in fully immunised since last quarter (%)	+1.0	-1.2	+0.4	-0.9	-1.2	-1.4	-1.3	-0.8	-1.1

Table 2. Percentage of children immunised at 24 months of age for the birth cohort 1 January to 31 March 2011, preliminary results, by disease and state or territory; assessment date 30 June 2013*

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,396	24,586	940	15,853	4,857	1,579	18,143	8,438	75,792
Diphtheria, tetanus, pertussis (%)	95.4	94.7	95.2	94.2	94.7	96.1	95.4	93.4	94.7
Poliomyelitis (%)	95.4	94.7	95.2	94.2	94.7	96.1	95.3	93.4	94.6
<i>Haemophilus influenzae</i> type b (%)	94.3	93.6	94.4	93.4	93.8	95.7	94.0	92.3	93.6
Measles, mumps, rubella (%)	94.4	93.6	94.9	93.6	94.0	95.3	94.2	92.4	93.7
Hepatitis B (%)	95.1	94.2	95.0	93.9	94.3	96.1	94.8	92.7	94.2
Fully immunised (%)	93.3	91.9	93.1	92.3	92.7	94.2	92.7	90.5	92.1
Change in fully immunised since last quarter (%)	+0.4	-0.0	-0.0	-0.3	+0.4	-0.7	+0.0	+0.1	-0.1

* The 12 months age data for this cohort were published in *Commun Dis Intell* 2012;36(3):E308.

Table 3. Percentage of children immunised at 60 months of age for the birth cohort 1 January to 31 March 2008, preliminary results, by disease and state or territory; assessment date 30 June 2013

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,289	24,798	904	16,275	5,074	1,628	18,554	8,567	77,089
Diphtheria, tetanus, pertussis (%)	91.8	92.6	91.4	92.0	92.0	94.0	92.9	90.2	92.3
Poliomyelitis (%)	91.7	92.5	91.6	92.0	91.9	93.9	92.9	90.2	92.2
Measles, mumps, rubella (%)	91.8	92.5	91.9	91.9	91.9	94.7	92.8	90.1	92.2
Fully immunised (%)	91.2	92.2	91.2	91.5	91.6	93.6	92.4	89.7	91.8
Change in fully immunised since last quarter (%)	-2.5	+0.5	-0.2	-0.4	+0.5	+1.8	-0.5	+0.4	+0.0

The percentage of children 'fully immunised' by 24 months of age for Australia decreased marginally from the previous quarter by 0.1 of a percentage point to 92.1% (Table 2). There were no important changes in coverage for any individual vaccines due at 24 months of age or by jurisdiction.

The percentage of children 'fully immunised' by 60 months of age for Australia remained at 91.8% (Table 3). This maintains the improvement in coverage for this age milestone. There were no important changes in coverage for any individual vaccines due at 60 months of age or by jurisdiction.

The Figure shows the trends in vaccination coverage from the first ACIR-derived published coverage estimates in 1997 to the current estimates. There is a clear trend of increasing vaccination coverage over time for children aged 12 months, 24 months and 60 months (from December 2007). However, for this quarter, a decrease was observed for 12 month coverage. Coverage at 24 and 60 months is still higher than coverage at 12 months of age.

Figure: Trends in vaccination coverage, Australia, 1997 to 31 March 2013, by age cohorts