## AUSTRALIAN CHILDHOOD IMMUNISATION COVERAGE, 1 JULY TO 30 SEPTEMBER COHORT, ASSESSED AS AT 31 DECEMBER 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 July and September 2013 using ACIR data as at 31 December 2013. 'Fully immunised' refers to vaccines on the National Immunisation Program Schedule, but excludes rotavirus, 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 3 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, 2 or 3 doses of Comvax hepatitis B vaccine or 3 doses of all other hepatitis B vaccines 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 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 0.8 of a percentage point to 90.1% (Table 1). This decrease is likely due to the recent inclusion of 13-valent pneumococcal conjugate vaccine in the coverage calculation algorithm for 'fully immunised' at 12 months of age. Except for the Australian Capital Territory, all jurisdictions experienced decreases in coverage for all individual vaccines due at 12 months of age, ranging from 0.1 of a percentage point to 2.4 percentage points.

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

	State or territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Number of children	1,451	25,558	961	16,036	5,171	1,498	19,142	8,441	78,258
Diphtheria, tetanus, pertussis (%)	94.1	90.4	90.6	91.8	90.6	90.2	91.6	90.8	91.1
Poliomyelitis (%)	94.1	90.2	90.5	91.7	90.4	89.9	91.5	90.8	91.0
Haemophilus influenzae type b (%)	94.1	90.1	90.6	91.6	90.4	89.5	91.2	90.5	90.8
Hepatitis B (%)	93.8	89.8	90.3	91.4	90.1	89.6	91.1	90.2	90.6
Pneumococcal	93.8	90.2	90.4	91.4	90.4	90.3	91.2	90.2	90.8
Fully immunised (%)	93.3	89.5	90.0	91.1	89.7	89.2	90.5	89.5	90.1
Change in fully immunised since last quarter (%)	+0.6	-0.5	-2.4	-0.4	-1.5	-2.4	-0.8	-1.2	-0.8

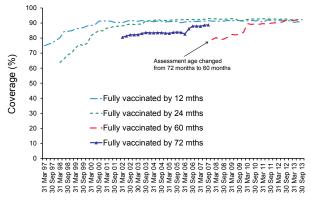
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The percentage of children 'fully immunised' by 24 months of age for Australia decreased marginally from the previous quarter by 0.1 of a percentage point to 92.3% (Table 2). There were no important changes in coverage for any individual vaccines due at 24 months of age or by jurisdiction.

The percentage of children 'fully immunised' by 60 months of age for Australia decreased marginally from the previous quarter by 0.3 of a percentage point to 92.1% (Table 3). 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). Coverage at 24 months is still higher than coverage at 12 months of age.

Figure: Trends in vaccination coverage, Australia, 1997 to 30 September 2013, by age cohorts



Coverage assessment date for each cohort

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

	State or territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Total number of children	1,377	24,948	944	15,473	5,026	1,527	18,730	8,407	76,432
Diphtheria, tetanus, pertussis (%)	95.4	94.5	94.4	94.8	94.9	95.9	95.5	93.1	94.7
Poliomyelitis (%)	95.4	94.4	94.3	94.8	94.9	95.9	95.4	93.1	94.7
Haemophilus influenzae type b (%)	95.9	95.0	95.1	94.9	95.2	96.1	95.6	93.4	95.0
Measles, mumps, rubella (%)	94.6	93.2	93.8	94.0	93.8	94.9	94.3	92.2	93.6
Hepatitis B (%)	95.2	94.1	94.0	94.5	94.6	95.5	95.0	92.4	94.3
Fully immunised (%)	93.6	91.8	92.5	92.8	92.3	93.6	92.9	90.1	92.2
Change in fully immunised since last quarter (%)	+1.5	0.0	-2.4	-0.1	0.0	0.0	0.0	-1.0	-0.1

<sup>\*</sup> The 12 months age data for this cohort were published in Commun Dis Intell 2013;37(1):E89.

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

	State or territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Total number of children	1,360	25,797	897	16,644	5,265	1,660	19,345	8,547	79,515
Diphtheria, tetanus, pertussis (%)	91.5	92.6	92.9	92.3	91.2	93.6	92.9	90.3	92.3
Poliomyelitis (%)	91.4	92.5	92.9	92.3	91.1	93.3	92.9	90.2	92.2
Measles, mumps, rubella (%)	91.1	92.4	92.8	92.4	91.3	93.6	92.8	90.1	92.2
Fully immunised (%)	90.9	92.1	92.2	91.9	90.8	92.8	92.4	89.5	91.8
Change in fully immunised since last quarter (%)	-2.1	-0.2	+1.8	-0.2	-1.1	-0.4	-0.4	-0.8	-0.3

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