

Australian Childhood Immunisation Coverage

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 2012. '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 a 3rd dose of a DTPa vaccine, a 3rd dose of polio vaccine, a 2nd or 3rd dose of a polyribosylribitol phosphate–outer membrane protein (PRP-OMP) containing *Haemophilus influenzae* type b (Hib) vaccine or a 3rd dose of any other Hib vaccine, and a 2nd or 3rd dose of a Comvax hepatitis B vaccine or a 3rd dose of dose of any other hepatitis B vaccine. 'Fully immunised' at 24 months of age is defined as a child having a record on the ACIR of a 3rd or 4th dose of a DTPa vaccine, a 3rd dose of polio vaccine, a 3rd or 4th dose of a PRP-OMP containing Hib vaccine or a 4th dose of any other Hib vaccine, a 3rd or 4th dose of Comvax hepatitis B vaccine or a 4th dose of any other hepatitis B vaccine, and a 1st 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 a 4th or 5th dose of a DTPa vaccine, a 4th dose of polio vaccine, and 2nd dose of an MMR-containing vaccine.

A full description of the basic methodology used can be found in CDI 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: brynleyh.hull@health.nsw.gov.au

Results

The percentage of children 'fully immunised' by 12 months of age for Australia decreased marginally from the previous quarter by 0.2 of a percentage point to 91.8% (Table 1). There were no important changes in coverage for any individual vaccines due at 12 months of age or by jurisdiction.

The percentage of children 'fully immunised' by 24 months of age for Australia decreased marginally from the previous quarter by 0.2 of a percentage point to 92.8% (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 increased from the previous quarter by 1.2 percentage points to 91.9% (Table 3). This continues the upward trend in coverage for this age milestone. There were important increases in coverage for all individual vaccines due at 60 months of age for most jurisdictions.

Table 1. Percentage of children immunised at 1 year of age for the birth cohort 1 July to 30 September 2011; preliminary results by vaccine and state or territory, assessment date 31 December 2012

Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,338	24,735	973	15,406	5,024	1,543	18,508	8,191	75,718
Diphtheria, tetanus, pertussis (%)	93.1	91.6	90.9	92.6	92.0	93.6	92.9	90.8	92.1
Poliomyelitis (%)	92.9	91.5	90.9	92.6	92.0	93.5	92.8	90.7	92.0
<i>Haemophilus influenzae</i> type b (%)	93.0	91.5	90.8	92.5	92.0	93.3	92.7	90.6	92.0
Hepatitis B (%)	92.5	91.3	90.5	92.2	91.7	93.1	92.4	90.2	91.7
Fully immunised (%)	92.5	91.2	90.5	92.2	91.6	93.1	92.3	90.0	91.6
Change in fully immunised since last quarter (%)	-0.6	-0.4	-2.3	+0.0	-0.4	+0.8	-0.0	-0.3	-0.2

Table 2. Percentage of children immunised at 2 years of age for the birth cohort 1 July to 30 September 2010; preliminary results by disease and state or territory, assessment date 31 December 2012*

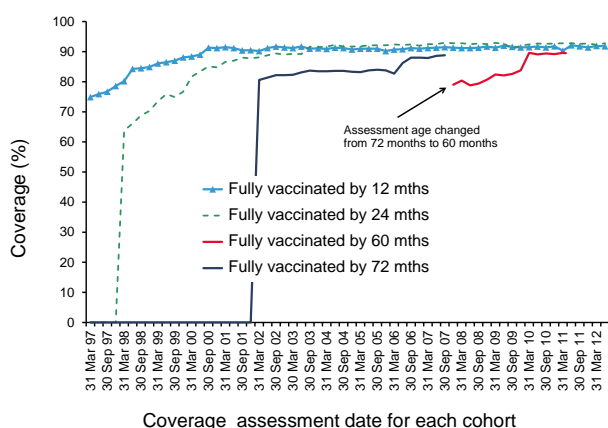
Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,354	24,914	932	15,797	4,922	1,512	18,500	8,174	76,105
Diphtheria, tetanus, pertussis (%)	95.8	94.8	95.2	94.8	94.3	95.3	95.9	93.3	94.9
Poliomyelitis (%)	95.7	94.7	95.2	94.8	94.2	95.3	95.8	93.3	94.8
<i>Haemophilus influenzae</i> type b (%)	95.9	95.1	95.3	94.8	94.2	95.6	95.8	93.5	95.0
Measles, mumps, rubella (%)	94.6	93.7	94.7	94.1	93.3	95.0	94.8	92.6	94.0
Hepatitis B (%)	94.8	94.3	94.6	94.3	93.9	95.3	95.3	92.5	94.4
Fully immunised (%)	93.1	92.3	93.6	92.8	92.0	93.9	93.5	90.8	92.6
Change in fully immunised since last quarter (%)	-0.3	-0.5	-0.2	+0.2	-1.1	+0.0	-0.0	+0.1	-0.2

* The 12 months age data for this cohort were published in *Commun Dis Intell* 2011;35(1):49.

Table 3. Percentage of children immunised at 6 years of age for the birth cohort 1 July to 30 September 2007; preliminary results by disease and state or territory, assessment date 31 December 2012

Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,316	25,441	878	16,620	5,165	1,733	19,023	8,440	78,616
Diphtheria, tetanus, pertussis (%)	92.8	92.1	91.1	92.5	92.0	93.7	93.6	90.3	92.4
Poliomyelitis (%)	92.7	92.0	91.1	92.5	92.0	93.5	93.5	90.4	92.3
Measles, mumps, rubella (%)	92.3	92.0	91.0	92.4	91.9	94.1	93.6	90.3	92.3
Fully immunised (%)	92.0	91.7	90.6	92.0	91.5	93.4	93.1	89.8	91.9
Change in fully immunised since last quarter (%)	-0.5	+1.0	+1.0	+1.5	+2.4	+0.5	+1.3	+0.8	+1.2

Figure: Trends in vaccination coverage, Australia, 1997 to 30 September 2012, by age cohort



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 5 years of age is now higher for the first time than coverage at 12 months of age.