Australian childhood immunisation coverage, 1 April 2014 to 31 March 2015, assessed as at 30 June 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 1 April 2014 and 31 March 2015 using ACIR data up to 30 June 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 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 *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 *Communicable Diseases Intelligence* 1998;22(3):36-37.

Results

The rolling annualised percentage of all children 'fully immunised' by 12 months of age for Australia increased marginally from the previous report by 0.3 of a percentage point to 91.3% (Table 1). Most 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 all children 'fully immunised' by 24 months of age for Australia decreased again for the 2nd consecutive report by 0.9 percentage points to 89.2% (Table 2). This decrease is due to the immunisation coverage assessment algorithm for the 24-month milestone

Table 1. Percentage of children immunised at 12 months of age for the birth cohort 1 April 2013 to 31 March 2014, preliminary results, by disease and state or territory; assessment date 30 June 2015

	State or territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Aust
Total number of children	5,657	98,744	3,795	62,947	20,104	5,971	76,090	34,034	307,342
Diphtheria, tetanus, pertussis (%)	94.1	91.9	91.0	92.4	91.8	91.3	92.1	92.4	92.1
Poliomyelitis (%)	94.0	91.9	91.0	92.4	91.8	91.3	92.1	92.3	92.1
Haemophilus influenzae type b (%)	93.7	91.8	90.9	92.3	91.7	91.2	91.9	92.1	92.0
Hepatitis B (%)	93.5	91.6	91.0	92.2	91.6	91.1	91.7	91.9	91.8
Pneumococcal	93.8	91.6	91.1	92.2	91.5	91.2	91.8	91.9	91.8
Fully immunised (%)	92.9	91.1	90.5	91.9	91.2	90.7	91.2	91.4	91.3

being amended in July 2014 to include a dose of meningococcal vaccine, a dose of varicella vaccine and a 2nd dose of MMR in the assessment of 'fully immunised'. All jurisdictions experienced similar decreases 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 1.2 percentage points, and 0.9 nationally). This decrease is due to the immunisation coverage assessment algorithm for the MMR vaccine being amended in July 2014 to look for a 2nd dose of MMR vaccine, rather than a 1st dose.

The rolling annualised percentage of all children 'fully immunised' by 60 months of age for Australia increased marginally from the previous report by 0.1 of a percentage point to 92.3% (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.

Figure: Trends in vaccination coverage, Australia, 1997 to 31 March 2015, by age cohorts

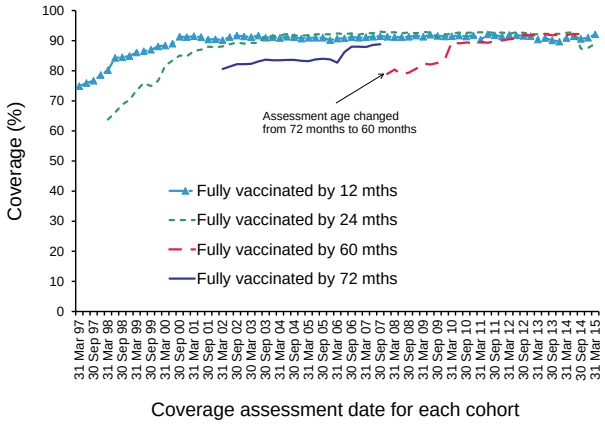

Table 2. Percentage of children immunised at 24 months of age for the birth cohort 1 April 2012 to 31 March 2013, preliminary results, by disease and state or territory; assessment date 30 June 2015

	State or territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Aust
Total number of children	5,531	101,192	3,600	63,189	20,218	5,889	76,870	34,281	310,770
Diphtheria, tetanus, pertussis (%)	96.1	95.1	95.2	95.0	94.8	95.1	95.6	94.8	95.2
Poliomyelitis (%)	96.1	95.0	95.3	95.0	94.7	95.0	95.6	94.7	95.1
Haemophilus influenzae type b (%)	95.0	93.7	94.9	94.2	93.4	93.5	94.4	93.5	94.0
Measles, mumps, rubella (%)	93.1	91.0	92.1	91.9	90.4	90.2	91.5	89.8	91.2
Hepatitis B (%)	95.7	94.6	95.3	94.6	94.4	94.8	95.2	94.2	94.7
Meningococcal C (%)	94.7	93.5	94.4	94.1	92.6	93.7	93.9	92.7	93.6
Varicella (%)	94.4	91.2	90.4	91.5	90.3	89.1	91.9	90.1	91.3
Fully immunised (%)	91.4	88.8	89.3	90.4	87.9	87.5	89.6	87.7	89.2

Table 3. Percentage of children immunised at 60 months of age for the birth cohort 1 April 2009 to 31 March 2010, preliminary results, by disease and state or territory; assessment date 30 June 2015

	State or territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Aust
Total number of children	5,559	101,107	3,517	65,254	20,290	6,385	76,035	34,222	312,369
Diphtheria, tetanus, pertussis (%)	93.8	93.2	93.1	92.8	91.5	93.4	93.2	91.2	92.8
Poliomyelitis (%)	93.8	93.2	93.1	92.8	91.5	93.3	93.2	91.2	92.8
Measles, mumps, rubella (%)	93.5	93.2	93.5	92.8	91.4	93.2	93.1	91.1	92.8
Fully immunised (%)	93.2	92.7	92.4	92.3	90.9	92.6	92.6	90.6	92.2