Additional reports

Australian Sentinel Practice Research Network

The Research and Health Promotion Unit of the Royal Australian College of General Practitioners operates the Australian Sentinel Practice Research Network (ASPREN). ASPREN is a network of general practitioners who report presentations of defined medical conditions each week. The aim of ASPREN is to provide an indicator of the burden of disease in the primary health setting and to detect trends in consultation rates.

There are currently about 50 general practitioners participating in the network from all states and territories. Seventy-five per cent of these are in metropolitan areas and the remainder are rural based. Between 4,000 and 6,000 consultations are recorded each week.

The list of conditions is reviewed annually by the ASPREN management committee and an annual report is published.

In 2004, nine conditions are being monitored, four of which are related to communicable diseases. These include influenza, gastroenteritis, varicella and shingles. There are two definitions for influenza for 2004. A patient may be coded once or twice depending on their symptoms. The definition for influenza 1 will include more individuals. Definitions of these conditions were published in Commun Dis Intell *2004;28:99–100.*

Data from 1 October to 31 December 2004 are shown as the rate per 1,000 consultations in Figures 6, 7, 8, and 9.

Figure 6. Consultation rates for influenza-like illness, ASPREN, 1 October to 31 December 2004, by week of report

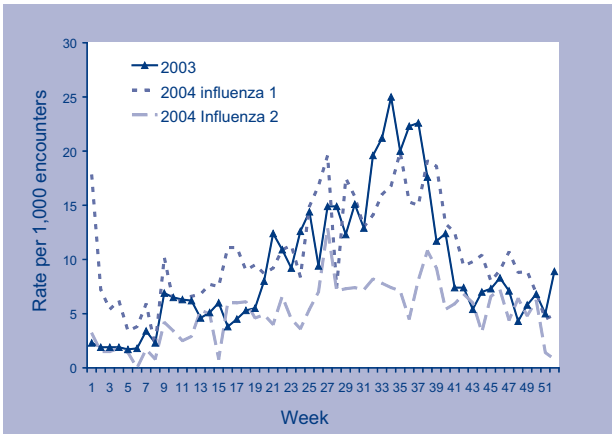


Figure 7. Consultation rates for gastroenteritis, ASPREN, 1 October to 31 December 2004, by week of report

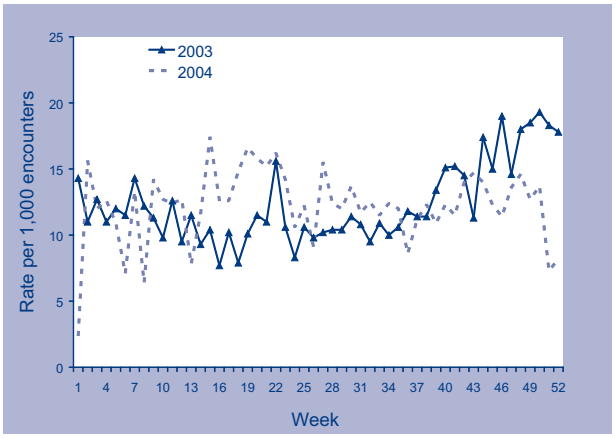


Figure 8. Consultation rates for varicella, ASPREN, 1 October to 31 December 2004, by week of report

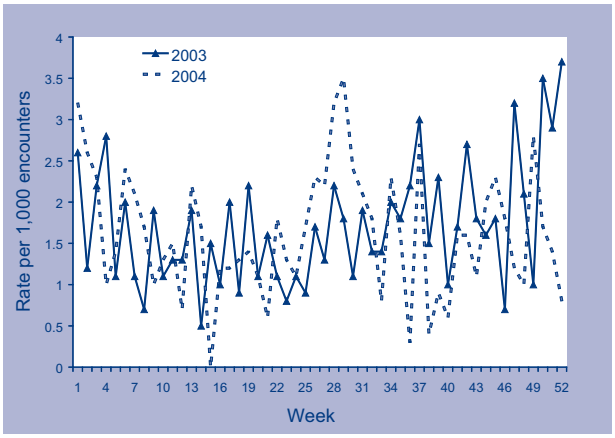
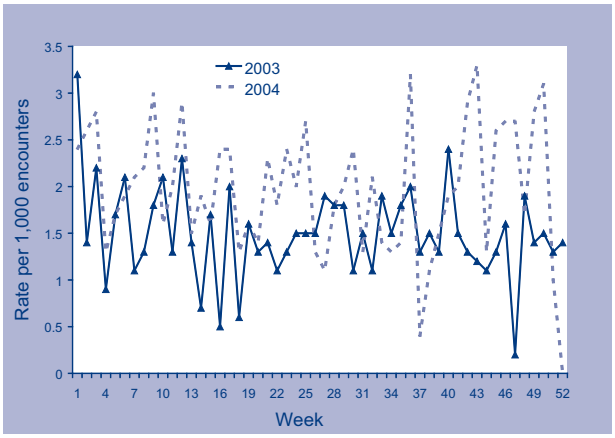


Figure 9. Consultation rates for shingles, ASPREN, 1 October to 31 December 2004, by week of report



Childhood immunisation coverage

Tables 6, 7 and 8 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 of age for the cohort born between 1 July and 30 September 2003, at 24 months of age for the cohort born between 1 July and 30 September 2002, and at 6 years of age for the cohort born between 1 July and 30 September 1998 according to the Australian Standard Vaccination Schedule.

For information about the Australian Childhood Immunisation Register see Surveillance systems reported in *CDI, published in* Commun Dis Intell *2004;28:102 and for a full description of the methodology used by the Register see* Commun Dis Intell *1998;22:36-37.*

Commentary on the trends in ACIR data is provided by the National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS). For further information please contact the NCIRS on telephone: +61 2 9845 1256, or email: brynleyh@chw.edu.au.

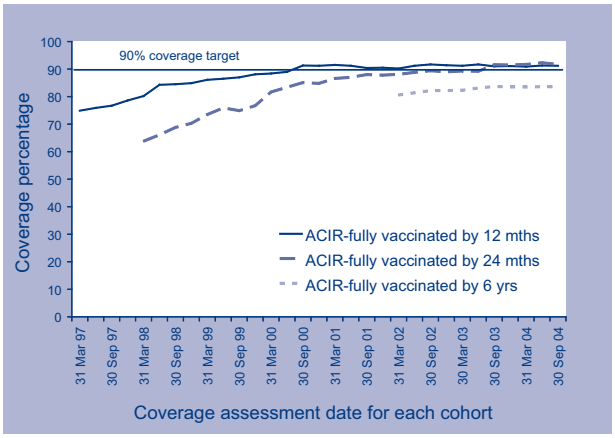
Immunisation coverage for children 'fully immunised' at 12 months of age for Australia decreased marginally from the last quarter by 0.1 percentage points to 91.2 per cent (Table 6). There was a substantial increase in 'fully immunised' coverage in Western Australia, with an increase of 2.9 percentage points, whilst all other jurisdictions experienced very little change in coverage. As expected, Western Australia also had increases in coverage for individual vaccines.

Coverage for children 'fully immunised' at 24 months of age for Australia decreased marginally from the last quarter by 0.6 percentage points to 91.7 per cent (Table 7). Coverage for individual vaccines decreased marginally in most jurisdictions with coverage greater than 95 per cent in almost all jurisdictions for all vaccines except *Haemophilus influenzae* type b.

Table 8 shows immunisation coverage estimates for 'fully immunised' and for individual vaccines at 6 years of age for Australia and by state or territory. 'Fully immunised' coverage at 6 years of age for Australia was unchanged overall, apart from increases in the Australian Capital Territory (+3.4%) and in the Northern Territory (+3.9%), also reflected in individual vaccines. Coverage for vaccines assessed at 6 years is at or near 85 per cent in the most jurisdictions, but Western Australia and Queensland remain below the average.

Figure 10 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 6 years, although the rate of increase has slowed over the past 18 months for all age groups. Figure 10 shows that there have now been five consecutive quarters where 'fully immunised' coverage at 24 months of age has been greater than 'fully immunised' coverage at 12 months of age, following the removal of the requirement for 18 month DTPa vaccine.

Figure 10. Trends in vaccination coverage, Australia, 1997 to 2004, by age cohorts



Acknowledgement: These figures were provided by the Health Insurance Commission (HIC), to specifications provided by the Australian Government Department of Health and Ageing. For further information on these figures or data on the Australian Childhood Immunisation Register please contact the Immunisation Section of the HIC: telephone: +61 2 6124 6607.

Table 6. Percentage of children immunised at 1 year of age, preliminary results by vaccine and state or territory for the birth cohort 1 July to 30 September 2003; assessment date 31 December 2004

Vaccine	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Number of children	1,051	22,438	839	13,035	4,629	1,438	16,129	5,954	65,513
Diphtheria, tetanus, pertussis (%)	93.9	92.3	91.2	92.5	92.5	94.1	92.6	93.2	92.6
Poliomyelitis (%)	93.7	92.2	90.5	92.5	92.4	93.9	92.6	93.1	92.5
Haemophilus influenzae type b (%)	95.8	94.3	95.6	94.8	94.5	95.1	94.7	96.3	94.8
Hepatitis B (%)	95.7	95.1	96.1	94.9	95.0	95.2	94.4	96.0	95.0
Fully immunised (%)	92.8	90.7	89.8	91.4	91.0	93.0	91.3	91.7	91.2
Change in fully immunised since last quarter (%)	-0.7	-0.5	-0.7	-0.3	-0.7	+0.5	-0.4	+2.9	-0.1

Table 7. Percentage of children immunised at 2 years of age, preliminary results by vaccine and state or territory for the birth cohort 1 July to 30 September 2002, assessment date 31 December 2004

Vaccine	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Total number of children	1,078	22,056	882	13,007	4,538	1,523	16,122	6,192	65,398
Diphtheria, tetanus, pertussis (%)	95.2	94.9	96.4	94.5	95.9	96.1	95.6	93.9	95.0
Poliomyelitis (%)	95.1	94.8	96.4	94.4	95.9	95.9	95.6	93.8	95.0
Haemophilus influenzae type b (%)	93.5	93.1	94.7	93.4	94.7	94.4	93.9	91.7	93.4
Measles, mumps, rubella (%)	95.2	93.0	95.7	93.5	95.0	94.2	94.3	92.3	93.6
Hepatitis B(%)	96.2	95.3	97.3	94.7	96.0	96.6	96.0	94.4	95.4
Fully immunised (%)†	92.0	91.1	93.8	91.6	93.3	92.9	92.6	89.8	91.7
Change in fully immunised since last quarter (%)	-0.7	-0.7	-0.0	-0.7	+0.3	-0.9	-0.5	-0.8	-0.6

* The 12 months age data for this cohort was published in *Commun Dis Intell* 2004;28:119.

† These data relating to 2-year-old children should be considered as preliminary. The proportions shown as 'fully immunised' appear low when compared with the proportions for individual vaccines. This is at least partly due to poor identification of children on immunisation encounter forms.

Table 8. Percentage of children immunised at 6 years of age, preliminary results by vaccine and state or territory for the birth cohort 1 July to 30 September 1998; assessment date 31 December 2004*

Vaccine	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Total number of children	1,084	22,538	772	13,716	4,847	1,689	16,511	6,797	67,954
Diphtheria, tetanus, pertussis (%)	88.9	85.5	87.3	83.0	85.7	85.7	87.3	82.1	85.2
Poliomyelitis (%)	89.5	85.6	87.7	83.1	86.0	85.6	86.8	82.3	85.2
Measles, mumps, rubella (%)	88.2	84.9	87.8	82.9	85.2	84.6	87.0	82.0	84.8
Fully immunised (%)[1]	87.2	83.7	86.7	81.6	84.3	83.4	85.7	80.6	83.6
Change in fully immunised since last quarter (%)	+3.4	+0.6	+3.9	-2.1	+0.5	-0.1	-0.1	+0.5	-0.0

* These data relating to 6-year-old children should be considered as preliminary. The proportions shown as 'fully immunised' appear low when compared with the proportions for individual vaccines. This is at least partly due to poor identification of children on immunisation encounter forms.

HIV and AIDS surveillance

National surveillance for HIV disease is coordinated by the National Centre in HIV Epidemiology and Clinical Research (NCHECR), in collaboration with State and Territory health authorities and the Commonwealth of Australia. Cases of HIV infection are notified to the National HIV Database on the first occasion of diagnosis in Australia, by either the diagnosing laboratory (Australian Capital Territory, New South Wales, Tasmania, Victoria) or by a combination of laboratory and doctor sources (Northern Territory, Queensland, South Australia, Western Australia). Cases of AIDS are notified through the State and Territory health authorities to the National AIDS Registry. Diagnoses of both HIV infection and AIDS are notified with the person's date of birth and name code, to minimise duplicate notifications while maintaining confidentiality.

Tabulations of diagnoses of HIV infection and AIDS are based on data available three months after the end of the reporting interval indicated, to allow for reporting delay and to incorporate newly available information. More detailed information on diagnoses of HIV infection and AIDS is published in the quarterly Australian HIV Surveillance Report, and annually in 'HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia, annual surveillance report'. The reports are available from the National Centre in HIV Epidemiology and Clinical Research, 376 Victoria Street, Darlinghurst NSW 2010. Internet: http://www.med.unsw.edu.au/nchecr. Telephone: +61 2 9332 4648. Facsimile: +61 2 9332 1837. For more information see Commun Dis Intell *2004;28:99.*

HIV and AIDS diagnoses and deaths following AIDS reported for 1 July to 30 September 2004, as reported to 31 December 2004, are included in this issue of Communicable Diseases Intelligence *(Tables 9 and 10).*

Table 9. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 July to 30 September 2004, by sex and state or territory of diagnosis

	Sex	State or territory								Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 2004	This period 2003	Year to date 2004	Year to date 2003
HIV diagnoses	Female	1	9	0	2	0	0	5	0	17	21	86	64
	Male	0	55	0	38	18	1	48	6	166	179	558	589
	Sex not reported	0	1	0	0	0	0	0	0	1	3	3	5
	Total*	1	65	0	40	18	1	53	6	184	204	648	659
AIDS diagnoses	Female	0	0	1	0	0	0	1	0	2	2	10	10
	Male	0	5	0	6	1	0	7	0	19	51	87	138
	Total*	0	5	1	6	1	0	8	0	21	53	98	149
AIDS deaths	Female	0	0	1	1	0	0	0	0	2	3	4	8
	Male	0	5	0	1	3	0	5	0	14	23	46	56
	Total*	0	5	1	2	3	0	5	0	16	26	50	64

* Totals include people whose sex was reported as transgender.

Table 10. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 30 September 2004, and reported by 31 December 2004, by sex and state or territory

	Sex	State or territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	31	769	17	224	82	8	307	161	1,599
	Male	246	12,574	122	2,407	826	89	4,717	1,086	22,067
	Not reported	0	239	0	0	0	0	22	0	261
	Total*	277	13,610	139	2,640	909	97	5,065	1,254	23,991
AIDS diagnoses	Female	9	221	2	61	30	4	94	34	455
	Male	92	5,110	41	970	386	48	1,853	407	8,907
	Total*	101	5,346	43	1,033	417	52	1,957	443	9,392
AIDS deaths	Female	6	128	1	41	20	2	58	22	278
	Male	71	3,486	26	632	268	32	1,364	282	6,161
	Total*	77	3,623	27	675	288	34	1,430	305	6,459

* Totals include people whose sex was reported as transgender.

Australian Paediatric Surveillance Unit

The Australian Paediatric Surveillance Unit (APSU) conducts nationally based active surveillance of rare diseases of childhood, including specified communicable diseases and complications of rare communicable diseases in children. The primary objectives of the APSU are to document the number of Australian children under 15 years newly diagnosed with specified conditions, their geographic distribution, clinical features, current management and outcome. Contributors to the APSU are clinicians known to be working in paediatrics and child health in Australia. In 2003, over 1,050 clinicians participated in the surveillance of 14 conditions through the APSU, with an overall response rate of 96 per cent. The APSU can be contacted by telephone: +61 2 9845 2200, email: apsu@chw.edu.au. For more information about APSU see Surveillance systems reported in CDI*, published in* Commun Dis Intell *2004;28:101.*

The results for the period 1 July to 31 December are shown in Table 11.

Table 11. Confirmed cases of communicable diseases reported to the Australian Paediatric Surveillance Unit, 1 July to 31 December 2004*

Condition	Previous reporting period January–June 2004	Current reporting period July-December 2004*
Acute flaccid paralysis	12	21
Congenital cytomegalovirus	8	17
Congenital rubella	1	1
Perinatal exposure to HIV infection	9	13
Neonatal herpes simplex virus infection	2	17
Hepatitis C virus infection	5	20

* Surveillance data are provisional and subject to revision.

National Enteric Pathogens Surveillance System

The National Enteric Pathogens Surveillance System (NEPSS) collects, analyses and disseminates data on human enteric bacterial infections diagnosed in Australia. These pathogens include Salmonella, Escherichia coli, Vibrio, Yersinia, Plesiomonas, Aeromonas *and* Campylobacter. Communicable Diseases Intelligence *quarterly reports include only* Salmonella*.*

Data are based on reports to NEPSS from Australian laboratories of laboratory-confirmed human infection with Salmonella*. Salmonella are identified to the level of serovar and, if applicable, phage-type. Infections apparently acquired overseas are included. Multiple isolations of a single* Salmonella *serovar/phage-type from one or more body sites during the same episode of illness are counted once only. The date of the case is the date the primary diagnostic laboratory isolated a* Salmonella *from the clinical sample.*

Note that the historical quarterly mean counts should be interpreted with caution, and are affected by surveillance artefacts such as newly recognised (such as S. *Typhimurium 197 and* S. *Typhimurium U290) and incompletely typed* Salmonella*.*

Reported by Joan Powling (NEPSS Co-ordinator) and Mark Veitch (Public Health Physician), Microbiological Diagnostic Unit — Public Health Laboratory, Department of Microbiology and Immunology, University of Melbourne. NEPSS can be contacted at the above address or by telephone: +61 3 8344 5701, or facsimile: +61 3 9625 2689.

Reports to the National Enteric Pathogens Surveillance System of Salmonella *infection for the period 1 October to 31 December 2004 are included in Tables 12 and 13. Data include cases reported and entered by 28 January 2005. Counts are preliminary, and subject to adjustment after completion of typing and reporting of further cases to NEPSS. For more information about NEPSS see* Surveillance systems reported in CDI, *published in* Commun Dis Intell *2004;28:101.*

Fourth quarter 2004

The total number of reports to NEPSS of human *Salmonella* infection increased to 1,765 in the fourth quarter of 2004, 53 per cent more than in third quarter of 2004, and approximately 15 per cent more than the final count for the fourth quarter of 2003. Case counts to 28 January 2005 are expected to comprise more than 95 per cent of the final counts for the quarter.

During the fourth quarter of 2004, the 25 most common *Salmonella* types in Australia accounted for 1,069 cases, 61 per cent of all reported human *Salmonella* infections.

Eighteen of the 25 most common *Salmonella* infections in the fourth quarter of 2004 were among the 25 most commonly reported in the previous quarter.

S. Typhimurium phage type 170/108 reports increased in number, particularly in New South Wales, making it the most common cause of human salmonellosis during this quarter. Reports of other common salmonellae with counts well above historical averages include *S.* Saintpaul (in northern Australia), *S.* Typhimurium phage type 197 (in the eastern mainland states, particularly Queensland), *S.* Virchow phage type 8 and S. Aberdeen (both particularly in Queensland), and *S.* Birkenhead (in New South Wales and Queensland). Counts of *S.* Hvittingfoss and *S.* Typhimurium phage type 12 and S. Waycross also remain elevated.

Acknowledgement: Thanks to contributing laboratories and scientists.

Table 12. Reports to the National Enteric Pathogens Surveillance System of *Salmonella* isolated from humans during the period 1 October to 31 December 2004, as reported to 28 January 2005

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total all *Salmonella* for quarter	16	486	79	631	127	38	255	133	1,765
Total contributing *Salmonella* types	13	116	40	119	47	19	95	68	241

Table 13. Top 25 *Salmonella* types identified in Australia, by state or territories, 1 October to 31 December 2004

National rank	*Salmonella* type	State or territory								Total 4th quarter 2004	Last 10 years mean 4th quarter	Year to date 2004	Year to date 2003
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
1	*S.* Typhimurium 170	3	119	0	12	0	2	25	0	161	41	575	441
2	*S.* Typhimurium 135	1	34	0	56	2	0	12	8	113	135	563	695
3	*S.* Saintpaul	0	6	15	58	3	0	5	12	99	68	389	298
4	*S.* Typhimurium 9	1	27	0	7	14	2	15	5	71	124	357	420
5	*S.* Typhimurium 197	1	10	0	40	0	0	12	1	64	12	267	172
6	*S.* Virchow 8	0	6	0	48	4	0	5	0	63	37	333	207
7	*S.* Birkenhead	0	28	0	26	1	0	6	0	61	57	263	172
8	*S.* Aberdeen	0	2	0	40	0	0	1	0	43	17	134	86
9	*S.* Infantis	1	17	1	3	4	0	13	3	42	29	154	200
10	*S.* Chester	0	5	0	17	6	1	3	4	36	36	193	218
11	*S.* Hvittingfoss	0	4	0	26	1	0	0	1	32	15	148	89
12	*S.* Typhimurium 12	0	16	0	5	1	0	8	0	30	11	234	114
13	*S.* Muenchen	0	5	1	15	0	0	1	4	26	27	115	134
14	Sal subsp I ser 16:l,v:-	2	10	2	6	0	0	1	2	23	11	59	81
15	*S.* Typhimurium RDNC	0	6	1	5	4	1	4	1	22	17	103	66
16	*S.* Waycross	0	1	0	20	0	0	0	0	21	16	120	72
17	*S.* Typhimurium 4	0	17	0	1	0	0	1	1	20	15	77	81
18	*S.* Anatum	0	4	3	7	1	0	1	3	19	19	90	123
19	*S.* Mississippi	0	0	0	1	0	16	2	0	19	14	75	81
20	*S.* Enteritidis 6a	1	4	0	3	3	1	4	3	19	4.4	70	24
21	*S.* Typhimurium 135a	0	0	0	0	19	0	0	0	19	3.5	31	21
22	*S.* Agona	1	5	0	4	1	1	5	0	17	15	80	66
23	*S.* Stanley	0	4	0	7	4	0	0	2	17	12	77	54
24	*S.* Zanzibar	0	2	1	10	1	1	1	0	16	7	53	42
25	*S.* Enteritidis 1b	0	2	0	1	0	1	6	6	16	2.2	42	16