

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 January to 31 March 2004 are shown as the rate per 1,000 consultations in Figures 8, 9, 10 and 11.

Figure 8. Consultation rates for influenza-like illness, ASPREN, 1 January to 31 March 2004, by week of report

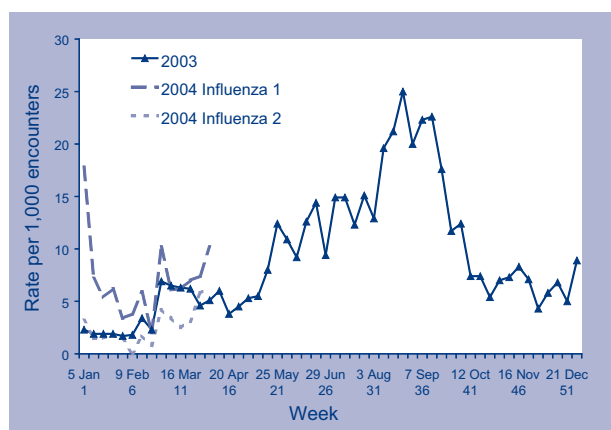


Figure 9. Consultation rates for gastroenteritis, ASPREN, 1 January to 31 March 2004, by week of report

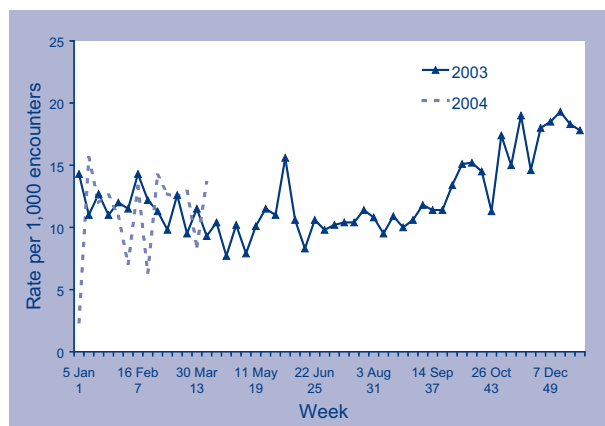


Figure 10. Consultation rates for varicella, ASPREN, 1 January to 31 March 2004, by week of report

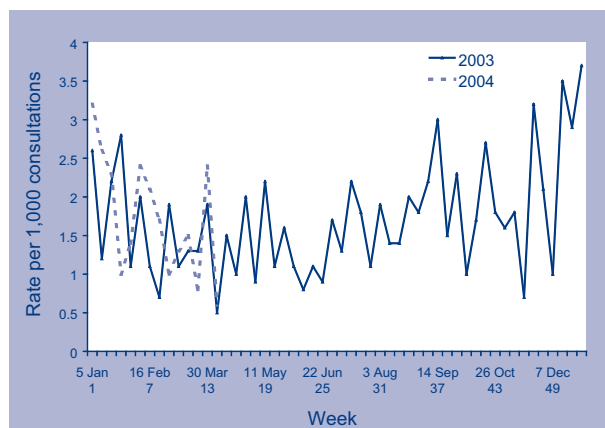
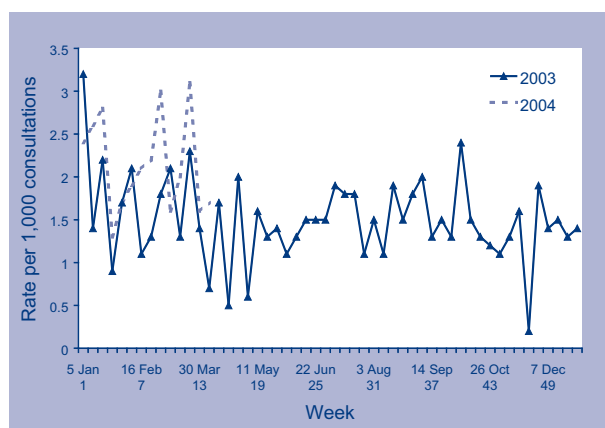


Figure 11. Consultation rates for shingles, ASPREN, 1 January to 31 March 2004, by week of report



Childhood immunisation coverage

Tables 10, 11 and 12 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 October and 31 December 2002, at 24 months of age for the cohort born between 1 October and 31 December 2001, and at 6 years of age for the cohort born between 1 October and 31 December 1997 according to the Australian Standard Vaccination Schedule.

A full description of the methodology used can be found in *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 at telephone: +61 2 9845 1256, Email: brynleyh@chw.edu.au.

Immunisation coverage for children 'fully immunised' at 12 months of age for Australia increased marginally from the last quarter by 0.1 percentage points to 91.1 per cent (Table 10). There were substantial increases in 'fully immunised' coverage by state or territory in two jurisdictions, the Northern Territory (+3.5%) and the Australian Capital Territory (+4.8%), whilst all other jurisdictions experienced very little change in coverage. The Northern Territory and the Australian Capital Territory also experienced increases in coverage for diphtheria, tetanus, pertussis (DTP), poliomyelitis (OPV), and *Haemophilus influenzae* type b (Hib) vaccines. Significant changes in coverage in jurisdictions like the Northern Territory and the Australian Capital Territory, which have relatively small populations, are likely to be the result of a small number of children having a large impact on the coverage percentages.

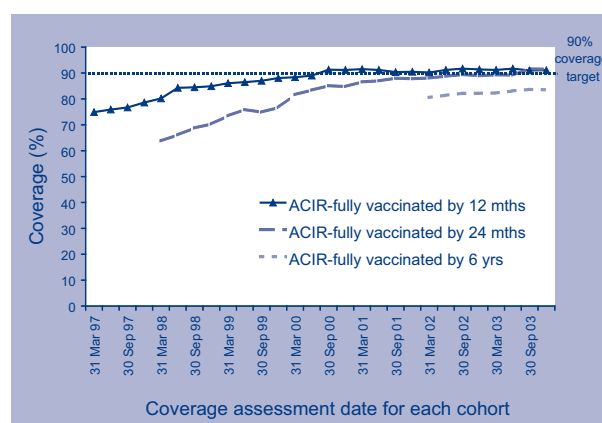
National coverage for children 'fully immunised' at 24 months of age decreased marginally from the last quarter by 0.1 percentage points to 91.5 per cent (Table 11). Coverage for individual vaccines for Australia remained largely unchanged. DTP coverage remained high for this age group in all jurisdictions due to the removal of the 4th dose of DTP (due at 18 months) from the immunisation schedule from the December 2003 quarter onwards. The only other significant jurisdictional change in coverage for this age group was a decrease in 'fully immunised' coverage in Tasmania (-2.3%) with a decrease in DTP coverage (-1.1%), in contrast to the national trend.

Table 12 shows immunisation coverage estimates for 'fully immunised' and for individual vaccines at six years of age for Australia by state or territory. 'Fully

immunised' coverage at six years of age for Australia decreased marginally by 0.2 percentage points from the previous quarter to 83.5 per cent with a significant decrease in coverage in the Northern Territory (-2.4%). Coverage for all individual vaccines at six years of age remained largely unchanged, except for the Northern Territory [DTP (-1.7%), OPV (-1.9%) and measles, mumps, rubella vaccine (-1.7%)] and in Tasmania [OPV (-1.1%)]. Coverage for vaccines assessed at six years is now at or close to 85 per cent in most jurisdictions, although coverage in Western Australia and the Northern Territory for this age group remains well below other jurisdictions.

Figure 12 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 six years, although the rate of increase has slowed over the past year for all age groups.

Figure 12. Trends in vaccination coverage, Australia, 1997 to 2003, by age cohorts



Acknowledgment: These figures were provided by the Health Insurance Commission (HIC), to specifications provided by the Commonwealth 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 10. Percentage of children immunised at 1 year of age, preliminary results by disease and state or territory for the birth cohort 1 October to 31 December 2002; assessment date 31 March 2004

Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Number of children	1,001	21,594	860	11,907	4,193	1,444	15,240	6,016	62,255
Diphtheria, tetanus, pertussis (%)	93.8	92.5	90.0	92.6	92.7	93.1	92.7	90.2	92.4
Poliomyelitis (%)	93.9	92.4	90.0	92.4	92.5	92.9	92.7	90.2	92.3
<i>Haemophilus influenzae</i> type b (%)	95.6	94.1	94.4	94.9	95.3	95.6	94.7	93.5	94.5
Hepatitis B (%)	95.9	94.8	95.1	95.2	95.3	95.3	94.4	93.1	94.7
Fully immunised (%)	93.1	91.0	89.1	91.5	91.8	91.8	91.5	89.0	91.1
Change in fully immunised since last quarter (%)	+4.8	+0.1	+3.5	+0.2	+0.1	+0.1	-0.3	-0.1	+0.1

Table 11. Percentage of children immunised at 2 years of age, preliminary results by disease and state or territory for the birth cohort 1 October to 31 December 2001; assessment date 31 March 2004*

Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	966	21,040	862	12,186	4,314	1,500	15,236	6,053	62,157
Diphtheria, tetanus, pertussis (%)	95.2	95.6	97.0	95.5	96.1	95.3	95.9	94.7	95.6
Poliomyelitis (%)	94.2	94.5	96.8	94.7	95.3	96.3	95.1	93.8	94.7
<i>Haemophilus influenzae</i> type b (%)	91.2	92.7	94.2	93.7	94.2	94.6	93.9	91.9	93.3
Measles, mumps, rubella (%)	90.9	92.7	95.6	93.9	94.2	95.0	94.1	92.2	93.4
Hepatitis B (%)	94.8	95.1	98.0	95.3	96.0	97.1	96.1	94.5	95.5
Fully immunised (%) [†]	88.4	90.8	93.7	92.0	92.7	92.1	92.4	90.3	91.5
Change in fully immunised since last quarter (%)	-0.6	-0.0	+0.1	-0.5	-0.1	-2.3	+0.3	+0.5	-0.1

* The 12 months age data for this cohort was published in *Commun Dis Intell* 2003;27:302.

† 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 12. Percentage of children immunised at 6 years of age, preliminary results by disease and state or territory for the birth cohort 1 October to 31 December 1997; assessment date 31 March 2004*

Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,032	22,306	795	12,782	4,655	1,558	16,144	6,395	65,667
Diphtheria, tetanus, pertussis (%)	86.1	85.3	81.8	84.5	84.8	86.3	87.2	81.5	85.2
Poliomyelitis (%)	86.1	85.3	83.0	84.5	85.3	86.2	87.2	81.6	85.3
Measles, mumps, rubella (%)	85.5	84.2	82.8	84.1	84.6	85.2	87.2	81.2	84.7
Fully immunised (%) ¹	84.1	83.2	80.0	83.0	83.3	84.1	85.9	79.6	83.5
Change in fully immunised since last quarter (%)	-0.6	+0.2	-2.4	-0.6	-0.3	-0.9	-0.3	-0.6	-0.2

* 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.

Gonococcal surveillance

John Tapsall, The Prince of Wales Hospital, Randwick NSW 2031 for the Australian Gonococcal Surveillance Programme.

The Australian Gonococcal Surveillance Programme (AGSP) reference laboratories in the various States and Territories report data on sensitivity to an agreed 'core' group of antimicrobial agents quarterly. The antibiotics currently routinely surveyed are penicillin, ceftriaxone, ciprofloxacin and spectinomycin, all of which are administered as single dose regimens and currently used in Australia to treat gonorrhoea. When *in vitro* resistance to a recommended agent is demonstrated in 5 per cent or more of isolates from a general population, it is usual to remove that agent from the list of recommended treatment.¹ Additional data are also provided on other antibiotics from time to time. At present all laboratories also test isolates for the presence of high level (plasmid-mediated) resistance to the tetracyclines, known as TRNG. Tetracyclines are however, not a recommended therapy for gonorrhoea in Australia. Comparability of data is achieved by means of a standardised system of testing and a program-specific quality assurance process. Because of the substantial geographic differences in susceptibility patterns in Australia, regional as well as aggregated data are presented. For more information see *Commun Dis Intell* 2004;28:100.

Reporting period 1 January to 31 March 2004

The AGSP laboratories received a total of 993 isolates in this quarter of which 915 underwent susceptibility testing. The total received numbered slightly less than the 1,051 isolated or referred in 2003. About 32 per cent of this total was from New South Wales, 28 per cent from Victoria, 13.5 per cent from Queensland, 11.9 per cent from the Northern Territory and 8.9 per cent from Western Australia. About five per cent of all isolates were from South Australia, but susceptibility data are not yet available from that centre. Isolates from other centres were few. Where comparisons of data in this quarter were made with those from the same period in 2003, South Australian data were excluded from both sets of data.

Penicillins

Figure 13 shows the proportions of gonococci fully sensitive (MIC \leq 0.03 mg/L), less sensitive (MIC 0.06–0.5 mg/L), relatively resistant (MIC \geq 1 mg/L) or else penicillinase producing (PPNG) aggregated for Australia and by state or territory. A high proportion of those strains classified as PPNG or else resistant by chromosomal mechanisms fail to respond to treatment with penicillins (penicillin, amoxycillin, ampicillin) and early generation cephalosporins.

In this quarter 20.9 per cent of all isolates examined were penicillin resistant by one or more mechanisms—nine per cent PPNG and 11.9 per cent by chromosomal mechanisms (CMRNG). The number of PPNG increased to 82 from the 67 seen in the same period in 2003, as did the number of CMRNG to 109 from 99. The proportion of all strains resistant to the penicillins by any mechanism ranged from 2.7 per cent in the Northern Territory to 33 per cent in Victoria.

The highest proportion of PPNG was found in Western Australia where the 17 PPNG accounted for 20 per cent of all isolates. Thirty-four PPNG, representing 10.8 per cent of all isolates, were found in New South Wales, 20 (7.3%) in Victoria and eight (6%) in Queensland. Three PPNG were found in the Northern Territory. More isolates were resistant to the penicillins by separate chromosomal mechanisms and CMRNG were especially prominent in Victoria (72 isolates, 26% of all gonococci tested). Twenty-two CMRNG were present in New South Wales (7% of NSW isolates), seven in Queensland and eight in Western Australia. No CMRNG were detected in the Northern Territory.

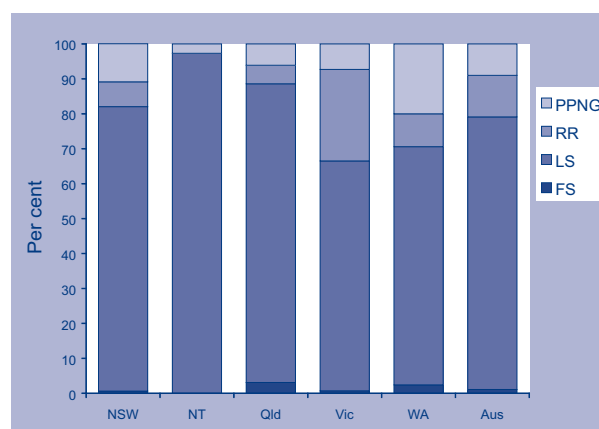
Ceftriaxone

Two isolates with decreased susceptibility to ceftriaxone were detected in New South Wales.

Spectinomycin

All isolates were susceptible to this injectable agent.

Figure 13. Categorisation of gonococci isolated in Australia, 1 January to 31 March 2004, by penicillin susceptibility and region



- FS Fully sensitive to penicillin, MIC \leq 0.03 mg/L.
 LS Less sensitive to penicillin, MIC 0.06–0.5 mg/L.
 RR Relatively resistant to penicillin, MIC \geq 1 mg/L.
 PPNG Penicillinase producing *Neisseria gonorrhoeae*.

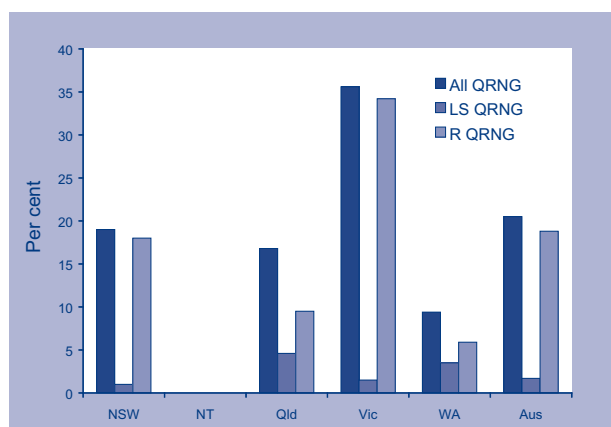
Quinolone antibiotics

Quinolone resistant *Neisseria gonorrhoeae* (QRNG) are defined as those isolates with an MIC to ciprofloxacin equal to, or greater than, 0.06 mg/L. QRNG are further subdivided into less sensitive (ciprofloxacin MICs 0.06 – 0.5 mg/L) or resistant (MIC \geq 1 mg/L) groups.

The total number (188) and proportion (20.5%) of all QRNG were both substantially higher than the corresponding figures in the first quarter of 2003 (108 isolates, 11.5%). The majority of QRNG (172 of 188, 91%) exhibited higher-level resistance.

QRNG were again widely distributed. The highest number (94) and proportion (36%) were found in Victoria. In New South Wales there were 60 QRNG (19% of isolates), in Queensland 16 (12%) and in Western Australia 8 (9)% (Figure 14). No QRNG detected in the Northern Territory.

Figure 14. The distribution of quinolone resistant isolates of *Neisseria gonorrhoeae* in Australia, 1 January to 31 March 2004, by jurisdiction



LS QRNG Ciprofloxacin MICs 0.06–0.5 mg/L.

R QRNG Ciprofloxacin MICs \geq 1 mg/L.

High level tetracycline resistance

The number (107) and proportion (11.7%) of high level tetracycline resistance (TRNG) detected decreased somewhat from the 2003 figures. TRNG represented between 10 per cent (Victoria and Queensland) and 26 per cent of isolates Western Australia. Two TRNG were present in the Northern Territory.

Reference

1. Management of sexually transmitted diseases. World Health Organization 1997; Document WHO/GPA/TEM94.1 Rev.1 p 37.

Meningococcal surveillance

John Tapsall, The Prince of Wales Hospital, Randwick, NSW, 2031 for the Australian Meningococcal Surveillance Programme.

The reference laboratories of the Australian Meningococcal Surveillance Programme report data on the number of laboratory confirmed cases confirmed either by culture or by non-culture based techniques. Culture positive cases, where a *Neisseria meningitidis* is grown from a normally sterile site or skin, and non-culture based diagnoses, derived from results of nucleic acid amplification assays and serological techniques, are defined as invasive meningococcal disease (IMD) according to Public Health Laboratory Network definitions. Data contained in the quarterly reports are restricted to a description of the number of cases per jurisdiction, and serogroup, where known. A full analysis of laboratory confirmed cases of IMD is contained in the annual reports of the Programme, published in *Communicable Diseases Intelligence*.

Laboratory confirmed cases of invasive meningococcal disease for the period 1 January to 31 March 2004, are included in this issue of *Communicable Diseases Intelligence* (Table 6).

Table 6. Number of laboratory confirmed cases of invasive meningococcal disease, Australia, 1 January to 31 March 2004, by jurisdiction and serogroup

Jurisdiction	Serogroup					
	B	C	Y	W135	ND	All
Australian Capital Territory	0 (1)	2				2 (1)
New South Wales	19 (11)	5 (7)	1 (2)	1	5 (4)	31 (24)
Northern Territory	3 (1)					3 (1)
Queensland	12 (9)	7 (7)			2 (2)	21 (18)
South Australia	4 (4)	0 (1)				4 (5)
Tasmania	2	0 (1)			2 (1)	4 (2)
Victoria	9 (5)	4 (13)	2		1 (3)	16 (21)
Western Australia	4 (6)	1 (2)				5 (8)
Australia	53 (37)	19 (31)	3 (2)	1 (0)	10 (10)	86 (80)

ND Not diagnosed.

Numbers in parentheses are the laboratory confirmed diagnoses of invasive meningococcal disease made in the same period in 2003.

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 2002, over 1,000 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 see *Commun Dis Intell* 2004;28:101.

The results for the period 1 January to 31 December 2003 are shown in Table 7.

Table 7. Confirmed cases of communicable diseases reported to the Australian Paediatric Surveillance Unit between 1 January and 31 December 2003*

Condition	Previous reporting period Jan–Dec 2002	Current reporting period Jan–Dec 2003*
Acute flaccid paralysis	30	15
Congenital cytomegalovirus		
confirmed (< 3 weeks of age)	9	6
suspected (3–52 weeks of age)	8	3
Congenital rubella	3 [†]	3
Perinatal exposure to HIV	25	14
HIV infection		1 [‡]
Neonatal herpes simplex virus infection	11	8
Hepatitis C virus infection	commenced 2003	11

* Surveillance data are provisional and subject to revision

† Two imported cases i.e. children born to mothers who had rubella in Indonesia. One child was born in Indonesia, one child born in Australia. The third infant was born in Victoria in 2001, but was not notified to the APSU until 2002. The parents were Fijian, it is not known where the mother acquired her infection.

‡ HIV infection through heterosexual contact

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/nchechr>. 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 October to 31 December 2003, as reported to 31 March 2004, are included in this issue of Communicable Diseases Intelligence (Tables 8 and 9).

Table 8. New diagnoses of HIV infection, new diagnoses of AIDS, and deaths following AIDS occurring in the period 1 October to 31 December 2003, by sex and state or territory of diagnoses

	Sex	State or territory								Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 2003	This period 2002	Year to date 2003	Year to date 2002
HIV diagnoses	Female	0	8	0	5	2	0	4	1	20	26	84	89
	Male	0	79	1	25	12	0	47	7	171	213	758	744
	Sex not reported	0	4	0	0	0	0	0	0	4	0	1	5
	Total ¹	0	91	1	30	14	0	51	8	195	240	853	839
AIDS diagnoses	Female	0	0	0	0	0	0	1	0	1	3	9	16
	Male	0	23	2	4	1	0	13	1	44	45	175	195
	Total ¹	0	23	2	4	1	0	14	1	45	48	185	212
AIDS deaths	Female	0	0	0	0	0	0	1	0	1	3	8	7
	Male	1	11	0	3	1	0	3	1	20	22	71	75
	Total	1	11	0	3	1	3	4	1	21	25	79	82

1. Totals include people whose sex was reported as transgender.

Table 9. Cumulative diagnoses of HIV infection, AIDS, and deaths following AIDS since the introduction of HIV antibody testing to 31 December 2003 and reported by 31 March 2004, by sex and state or territory

Sex		State or territory								Australia
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	29	723	15	209	80	7	291	159	1,513
	Male	243	12,335	120	2,363	796	85	4,645	1,055	21,642
	Not reported	0	240	0	0	0	0	22	0	262
	Total ¹	272	13,325	135	2,580	876	92	4,976	1,221	23,477
AIDS diagnoses	Female	10	216	1	56	30	4	89	34	440
	Male	93	5,024	41	941	380	47	1,817	403	8,746
	Total ¹	103	5,255	42	999	410	51	1,916	439	9,215
AIDS deaths	Female	6	127	0	38	20	2	58	22	273
	Male	72	3,429	26	617	256	31	1,343	276	6,050
	Total ¹	78	3,565	26	657	276	33	1,409	299	6,343

1. Totals include people whose sex was reported as transgender.

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*, *E. coli*, *Vibrio*, *Yersinia*, *Plesiomonas*, *Aeromonas* and *Campylobacter*.

Communicable Diseases Intelligence NEPSS 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.

Interpret historical quarterly mean counts cautiously – these may be affected by outbreaks and surveillance artefacts such as newly recognised 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, facsimile: +61 3 9625 2689.

Reports to the National Enteric Pathogens Surveillance System of *Salmonella* infection for the period 1 January to 31 March 2004 are included in Tables 13 and 14. Data include cases reported and entered by 28 April 2004. Counts are preliminary, and subject to adjustment after completion of typing and reporting of further cases to NEPSS. For more information see *Commun Dis Intell* 2004;28:101–102.

1 January to 31 March 2004

The total number of reports to NEPSS of human *Salmonella* infection increased to 2,703 in the first quarter of 2004, more than double the count in the fourth quarter of 2003, and 10 per cent more than in the comparable first quarter of 2003. The incidence of human salmonellosis typically peaks in the first few months of each year. Case counts to 28 April 2004 are approximately 95 per cent of the expected final counts for the quarter.

During the first quarter of 2004, the 25 most common *Salmonella* types in Australia accounted for 1,857 cases, 69 per cent of all reported human *Salmonella* infections.

Twenty-one of the 25 most common *Salmonella* infections in the fourth quarter of 2003 were amongst the 25 most commonly reported in the previous quarter.

Among the most common salmonellae in the nation, there were typical widespread seasonal increases in counts of *S. Typhimurium* phage type 135 and *S. Typhimurium* phage type 9.

S. Typhimurium phage type 170 (and the similar *S. Typhimurium* phage type 108) were uncommon before emerging as a common human pathogen during 2000 and 2001, and are now among the most common salmonellae in New South Wales, Victoria and South Australia.

Reports of *S. Typhimurium* phage type 197 and *S. Typhimurium* phage type U290 increased markedly during 2002, particularly in the south-eastern states, and remain elevated.

Reports of other common salmonellae with counts exceeding historical averages include *S. Typhimurium* phage type 12 (particularly in New South Wales), and *S. Virchow* phage type 8 and *S. Hvittingfoss* (both in Queensland).

Acknowledgement

We thank scientists, diagnostic and reference laboratories, State and Territory health departments, and the Australian Government Department of Health and Ageing for their contributions to NEPSS.

Table 13. Reports to the National Enteric Pathogens Surveillance System of *Salmonella* isolated from humans during the period 1 January to 31 March 2004, as reported to 28 April 2004

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total all <i>Salmonella</i> for quarter	28	796	110	1,088	128	47	319	187	2,703
Total contributing <i>Salmonella</i> types	17	121	41	114	47	13	84	69	225

Table 14. Top 25 *Salmonella* types identified in Australia, 1 January to 31 March 2004, by state or territory

National rank	Salmonella type	State or territory								Total 1st quarter 2004	Last 10 years mean 1st quarter	Year to date 2004	Year to date 2003
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
1	<i>S. Typhimurium</i> 135	4	80	2	59	5	0	18	32	200	229	200	407
2	<i>S. Typhimurium</i> 170	5	117	2	16	0	1	55	0	196	57	196	205
3	<i>S. Typhimurium</i> 9	3	48	0	30	7	1	53	2	144	177	144	128
4	<i>S. Typhimurium</i> 12	1	113	0	19	3	0	3	1	140	13	140	42
5	<i>S. Virchow</i> 8	0	12	1	109	0	2	15	0	139	71	139	69
6	<i>S. Saintpaul</i>	0	9	10	90	5	0	5	10	129	122	129	124
7	<i>S. Birkenhead</i>	1	19	0	85	0	0	1	0	106	92	106	81
8	<i>S. Typhimurium</i> 197	1	14	0	58	0	0	13	0	86	9	86	79
9	<i>S. Chester</i>	1	14	5	41	4	0	5	8	78	63	78	113
10	<i>S. Hvitvingfoss</i>	0	8	0	53	1	0	1	3	66	25	66	34
11	<i>S. Waycross</i>	0	12	0	49	0	0	0	0	61	40	61	30
12	<i>S. Typhimurium</i> U290	1	29	0	5	1	1	13	3	53	7	53	36
13	<i>S. Infantis</i>	3	24	2	5	3	0	11	3	51	48	51	71
14	<i>S. Anatum</i>	0	7	3	26	2	0	2	5	45	31	45	33
15	<i>S. Muenchen</i>	0	4	8	19	0	1	1	9	42	58	42	61
16	<i>S. Mississippi</i>	0	1	1	2	1	34	3	0	42	35	42	40
17	<i>S. Singapore</i>	1	12	1	15	9	0	0	1	39	20	39	29
18	<i>S. Typhimurium</i> 108	0	10	5	0	24	0	0	0	39	6	39	16
19	<i>S. Aberdeen</i>	0	0	0	34	0	0	0	0	34	38	34	35
20	<i>S. Typhimurium</i> 126	0	6	0	7	1	0	12	5	31	31	31	24
21	<i>S. Agona</i>	0	9	1	14	0	0	4	3	31	19	31	20
22	<i>S. Typhimurium</i> 4	0	24	0	1	0	0	4	0	29	20	29	25
23	<i>S. Potsdam</i>	0	5	1	14	1	1	3	1	26	21	26	22
24	<i>S. Typhimurium</i> RDNC	0	6	0	11	4	1	1	2	25	36	25	18
25	<i>S. Havana</i>	0	5	6	0	6	0	1	7	25	18	25	21