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 2005, six 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 2005. 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 *2005;29:91.*

Data from 1 January to 30 June 2005 compared with 2004 are shown as the rate per 1,000 consultations in Figures 2 and 3.

Figure 2. Consultation rates for influenza-like illness, ASPREN, 1 January to 30 June 2005, by week of report

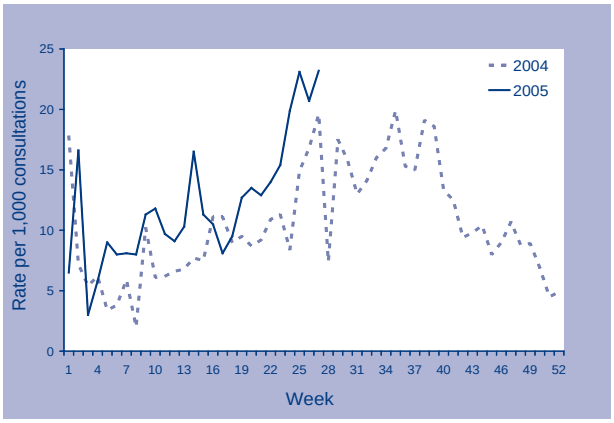
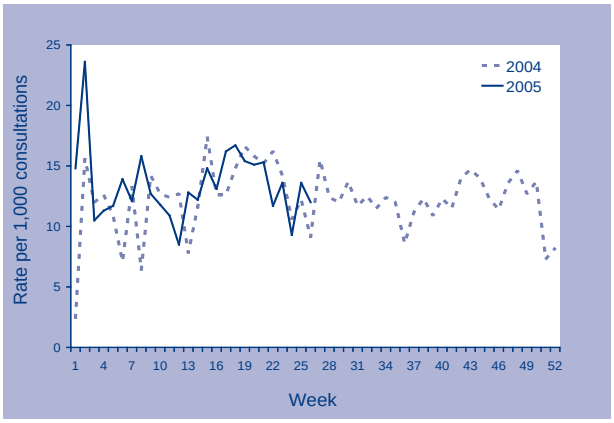


Figure 3. Consultation rates for gastroenteritis, ASPREN, 1 January to 30 June 2005, by week of report



Childhood immunisation coverage

Tables 8, 9 and 10 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 January and 31 March 2004, at 24 months of age for the cohort born between 1 January and 31 March 2003, and at 6 years of age for the cohort born between 1 January and 31 March 1999 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 2005;29:90 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 1435 or 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 0.3 percentage points to 91.0 per cent (Table 8). There was a substantial increase in 'fully immunised' coverage by State and Territory in only one jurisdiction, the Australian Capital Territory, with an increase of 3.0 percentage points. As expected, the Australian Capital Territory also had increases in coverage for individual vaccines.

There was a 0.1 per cent increase in coverage for children 'fully immunised' at 24 months of age for Australia, to 91.8 per cent (Table 9). Coverage for individual vaccines remained largely unchanged in most jurisdictions and was greater than 95 per cent in almost all jurisdictions for all vaccines, except *Haemophilus influenzae* type b and measles-mumps-rubella.

Table 10 shows immunisation coverage estimates for children 'fully immunised' at 6 years of age and for individual vaccines for Australia by state and territory. Coverage was largely unchanged in most jurisdictions, apart from decreases in Tasmania and the Australian Capital Territory. This was also reflected in individual vaccines. Coverage for

Table 8. Percentage of children immunised at 1 year of age, preliminary results by disease and state or territory for the birth cohort 1 January to 31 March 2004; assessment date 30 June 2005

Vaccine	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Number of children	1,012	21,604	903	13,187	4,445	1,353	15,600	6,485	64,589
Diphtheria, tetanus, pertussis (%)	96.4	92.1	92.8	91.9	91.7	92.9	93.1	91.0	92.3
Poliomyelitis (%)	96.3	92.0	92.5	91.8	91.7	93.1	93.0	90.9	92.2
Haemophilus influenzae type b (%)	96.9	93.9	96.3	93.8	94.6	94.9	94.8	93.8	94.3
Hepatitis B (%)	97.2	94.8	96.9	94.4	94.7	94.8	94.7	93.5	94.6
Fully immunised (%)	95.7	90.6	91.9	90.8	91.0	91.2	91.8	90.0	91.0
Change in fully immunised since last quarter (%)	+2.9	-0.1	-0.3	-0.0	-0.1	-1.7	+1.0	+0.7	+0.3

Table 9. Percentage of children immunised at 2 years of age, preliminary results by disease and state or territory for the birth cohort 1 January to 31 March 2003; assessment date 30 June 2005*

Vaccine	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	981	21,109	926	12,740	4,237	1,391	15,052	6,191	62,627
Diphtheria, tetanus, pertussis (%)	94.6	94.8	96.3	94.8	94.7	97.0	95.8	93.8	95.0
Poliomyelitis (%)	94.5	94.7	96.5	94.8	94.7	97.2	95.7	93.7	94.9
Haemophilus influenzae type b (%)	93.0	92.7	94.3	93.5	93.4	95.7	94.3	91.3	93.3
Measles, mumps, rubella (%)	93.7	92.9	95.6	93.4	93.6	95.5	94.4	92.0	93.4
Hepatitis B(%)	95.0	95.4	97.8	95.6	95.5	97.6	96.5	94.2	95.7
Fully immunised (%)	91.6	91.2	93.6	91.6	92.1	94.6	92.9	90.0	91.8
Change in fully immunised since last quarter (%)	-2.0	+0.3	-1.3	-0.3	-0.7	+0.6	+0.7	-0.6	+0.1

* The 12 months age data for this cohort was published in *Commun Dis Intell* 2004;28:422.

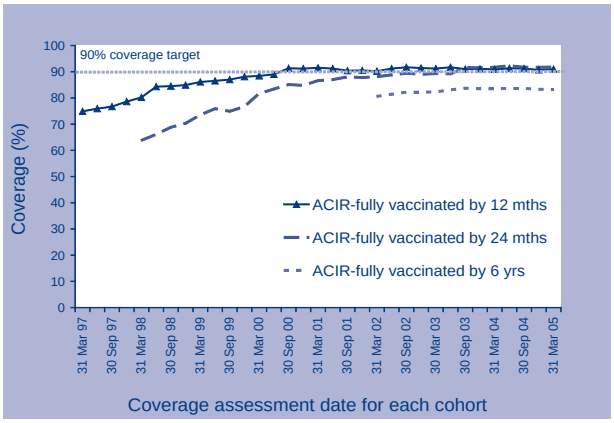
Table 10. Percentage of children immunised at 6 years of age, preliminary results by disease and state or territory for the birth cohort 1 January to 31 March 1999; assessment date 30 June 2005

Vaccine	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	1,032	22,320	852	13,611	4,749	1,618	15,956	6,745	66,883
Diphtheria, tetanus, pertussis (%)	88.3	85.1	85.3	81.3	83.8	83.1	87.0	82.3	84.4
Poliomyelitis (%)	88.4	85.0	86.7	81.6	84.0	83.3	87.3	82.5	84.5
Measles, mumps, rubella (%)	88.1	84.9	87.0	81.5	84.0	82.8	87.0	82.4	84.4
Fully immunised (%)	87.9	83.8	84.3	79.9	82.8	81.9	86.2	80.8	83.2
Change in fully immunised since last quarter (%)	-1.9	+0.1	-0.8	-0.7	+0.0	-2.3	+0.4	+1.0	-0.1

vaccines assessed at 6 years is at or near 85 per cent in most jurisdictions, but Western Australia, Tasmania and Queensland still remain below this.

Figure 4 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 two years for all age groups. The figure shows that there have now been seven 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 the 18 month DTPa vaccine. However, both measures have been above 90 per cent for this 21-month period and show levels of high coverage being maintained over a significant period of time.

Figure 4. Trends in vaccination coverage, Australia, 1997 to 2005, by age cohorts



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 *2005;29:92-93.*

Reporting period 1 January to 31 March 2005

The AGSP laboratories received a total of 985 isolates in this quarter of which 952 underwent susceptibility testing. This represents a slight decrease from the 1,001 reported for the same period in 2004 and 1,051 seen in 2003. About 33 per cent of this total was from New South Wales, 20 per cent from Queensland, 16 per cent from Victoria, 15 per cent from the Northern Territory, 11 per cent from Western Australia and four per cent from South Australia. Small numbers of isolates were also received from Tasmania and the Australian Capital Territory.

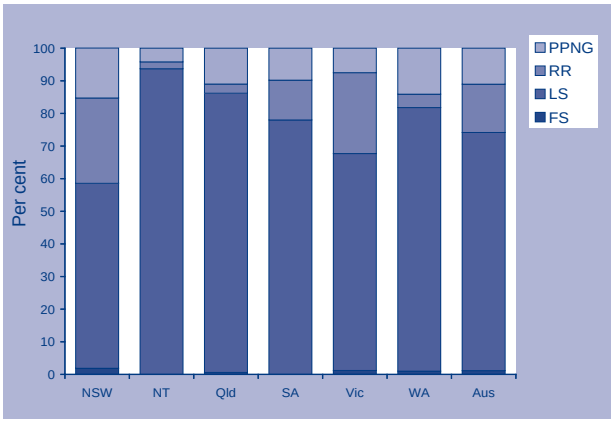
Penicillins

In this quarter 246 (25.8%) of all isolates examined were penicillin resistant by one or more mechanisms. One hundred and five (11%) were penicillinase producing *Neisseria gonorrhoeae* (PPNG) and 141 (14.8%) resistant by chromosomal mechanisms, (CMRNG). The proportion of all strains resistant to the penicillins by any mechanism ranged from 6.2 per cent in the Northern Territory to 41 per cent in New South Wales.

Figure 5 shows the proportions of gonococci fully sensitive (MIC ≤0.03 mg/L), less sensitive (MIC 0.06–0.5 mg/L), relatively resistant (MIC ≥1 mg/L) or else PPNG aggregated for Australia and by state and territory. A high proportion 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.

The highest number and proportion of PPNG was found in New South Wales where the 49 PPNG were 15.3 per cent of all isolates. Fourteen PPNG representing 14.1 per cent of all isolates were found in Western Australia, 12 (7.5%) in Victoria and 20 (11%) in Queensland. Six PPNG (4.2%) were found in the Northern Territory, all from Darwin. Increases in PPNG numbers (compared with the first quarter of 2004) were noted in Queensland (from 6 to 20) and New South Wales. More isolates were resistant to the penicillins by separate chromosomal mechanisms and CMRNG were especially prominent in Victoria (40 isolates, 25 per cent of all gonococci

Figure 5. Categorisation of gonococci isolated in Australia, 1 January to 31 March 2005, by penicillin susceptibility and region



FS Fully sensitive to penicillin, MIC ≤0.03 mg/L.

LS Less sensitive to penicillin, MIC 0.06–0.5 mg/L.

RR Relatively resistant to penicillin, MIC ≥1 mg/L.

PPNG Penicillinase producing *Neisseria gonorrhoeae.*

tested) and New South Wales (84 CMRNG, 26%). Five CMRNG were present in Queensland (2.8% of all Queensland isolates) and Western Australia (4%), four (12%) in South Australia and three (2.1%, again all from Darwin) in the Northern Territory. No PPNG or CMRNG were reported from Tasmania or the Australian Capital Territory.

Ceftriaxone

Fifteen isolates with decreased susceptibility to ceftriaxone (MIC range 0.06–0.12 mg/L) were detected. Thirteen were found in New South Wales and one each in Victoria and Queensland. These strains have been particularly prominent in Japan for quite some time and the decreased susceptibility is associated with the presence of altered *penA* gene resulting in a changed penicillin binding protein 2. All 15 isolates were penicillin resistant, 14 by chromosomal mechanisms and one was a PPNG. Twelve were also quinolone resistant. It is emphasised that no treatment failures have been documented locally when a 250 mg IM dose of ceftriaxone has been used.

Spectinomycin

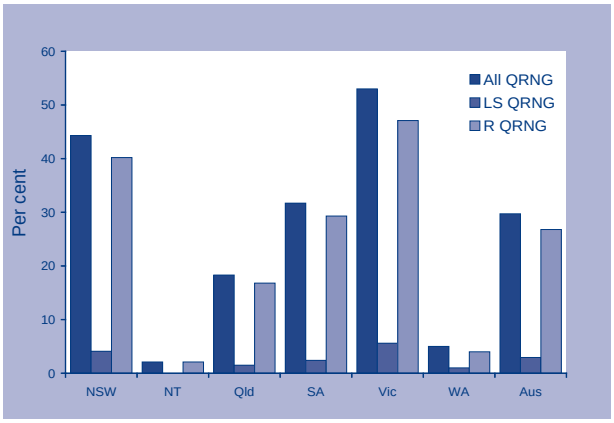
All isolates were susceptible to this injectable agent.

Quinolone antibiotics

The total number (283) and proportion (29.7%) of quinolone resistant *Neisseria gonorrhoeae* (QRNG) were both substantially higher than the corresponding figures in the first quarter of 2004 (188 QRNG, 20.5%) and 2003 (108 isolates, 11.5%). The majority of QRNG (255 of 283, 90%) exhibited higher-level resistance. 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 ≥1 mg/L) groups.

QRNG were again widely distributed and were detected in all states and territories with the exception of Tasmania (Figure 6). The highest proportion of QRNG was found in Victoria where 85 QRNG represented 53 per cent of all isolates. In New South Wales there were 142 QRNG (44% of isolates), in Queensland 33 (18.3%), in South Australia 13 (32%) and in Western Australia 5 (5%). Two QRNG were detected in the Northern Territory and a single isolate was detected in the Australian Capital Territory.

Figure 6 The distribution of quinolone resistant isolates of *Neisseria gonorrhoeae* in Australia, 1 January to 31 March 2005, by jurisdiction



LS QRNG Ciprofloxacin MICs 0.06–0.5 mg/L.

R QRNG Ciprofloxacin MICs ≥1 mg/L.

High level tetracycline resistance

The number (145) and proportion (15.2%) of tetracycline resistance *Neisseria gonorrhoeae* (TRNG) detected also increased when compared with the 2004 (107, 11.7%) figures. TRNG were found in all states and territories and represented between 10 per cent (Queensland) and 23 per cent (South Australia and Victoria) of isolates in mainland states. Six TRNG were present in the Northern Territory, two in Tasmania and one in the Australian Capital 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. For more information see Commun Dis Intell *2005;29:93.*

Laboratory confirmed cases of invasive meningococcal disease for the period 1 to 30 June 2005, are included in this issue of Communicable Diseases Intelligence *(Table 11).*

Table 11. Number of laboratory confirmed cases of invasive meningococcal disease, Australia, 1 April to 30 June 2005, by jurisdiction and serogroup

Jurisdiction	Year	Serogroup													
		A		B		C		Y		W135		ND		All	
		Q2	ytd	Q2	ytd	Q2	ytd	Q2	ytd	Q2	ytd	Q2	ytd	Q2	ytd
Australian Capital Territory	05			1	2	1	2							2	4
	04			(0)	(4)	(2)	(4)							(2)	(8)
New South Wales	05			17	33	2	9	2	3	3	3	0	1	24	49
	04			(22)	(37)	(5)	(9)	(1)	(2)	(2)	(2)	(5)	(11)	(37)	(61)
Northern Territory	05			2	3	2	2			0	0			4	5
	04			(1)	(6)	(1)	(1)			(1)	(1)			(3)	(8)
Queensland	05	0	0	12	21	2	6	0	0	0	0	0	0	14	27
	04	(1)	(1)	(11)	(23)	(5)	(12)	(1)	(1)	(1)	(1)	(6)	(8)	(19)	(40)
South Australia	05			4	4	0	2							4	6
	04			(5)	(9)	(0)	(0)							(5)	(9)
Tasmania	05			2	2	0	0			0	0	0	0	2	2
	04			(0)	(2)	(0)	(0)			(1)	(1)	(1)	(3)	(2)	(6)
Victoria	05	1	1	8	15	2	3	0	0	0	2	0	1	11	22
	04	(0)	(0)	(18)	(28)	(9)	(9)	(1)	(3)	(0)	(0)	(1)	(2)	(25)	(42)
Western Australia	05			4	9	0	0	1	2					5	11
	04			(8)	(12)	(1)	(3)	(0)	(0)					(9)	(14)
Australia	05	1	1	50	89	9	24	3	5	3	5	0	2	66	126
	04	(1)	(1)	(65)	(121)	(19)	(37)	(4)	(6)	(5)	(5)	(8)	(18)	(102)	(188)

Numbers of laboratory-confirmed diagnoses of invasive meningococcal disease made in the same period in 2004 are shown in parentheses.

Q2 = 2nd quarter.

Ytd = Year to 30 June 2005.

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 *2005;29:91–92.*

HIV and AIDS diagnoses and deaths following AIDS reported for 1 January to 31 March 2005, as reported to 30 June 2005, are included in this issue of Communicable Diseases Intelligence *(Tables 12 and 13).*

Table 12. New diagnoses of HIV infection, new diagnoses of AIDS, and deaths following AIDS occurring in the period 1 January to 31 March 2005, 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 2005	This period 2004	YTD 2005	YTD 2004
HIV diagnoses	Female	0	5	0	7	0	0	7	5	24	38	24	38
	Male	0	78	0	36	15	0	37	8	174	215	174	215
	Sex not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total*	0	83	0	43	15	0	44	13	198	254	198	254
AIDS diagnoses	Female	0	1	0	3	0	0	2	0	6	4	6	4
	Male	0	8	0	4	0	0	10	2	24	45	24	45
	Total*	0	9	0	7	0	0	12	2	30	50	30	50
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	1	0	1
	Male	0	5	0	2	0	0	2	1	10	15	10	15
	Total	0	5	0	2	0	0	2	1	10	16	10	16

* Totals include people whose sex was reported as transgender.

Table 13. Cumulative diagnoses of HIV infection, AIDS, and deaths following AIDS since the introduction of HIV antibody testing to 31 March 2005 and reported by 30 June 2005, by sex and state or territory

	Sex	State or territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	31	791	18	238	84	8	318	170	1,658
	Male	247	12,779	123	2,474	849	89	4,803	1,111	22,475
	Not reported	0	235	0	0	0	0	22	0	257
	Total*	278	13,833	141	2,721	934	97	5,162	1,288	24,454
AIDS diagnoses	Female	9	225	2	66	31	4	99	35	471
	Male	92	5,181	42	982	387	48	1,883	414	9,029
	Total*	101	5,421	44	1,050	419	52	1,992	451	9,530
AIDS deaths	Female	6	128	1	41	20	2	59	23	280
	Male	71	3,518	26	642	269	32	1,372	289	6,219
	Total*	77	3,655	27	685	289	34	1,439	313	6,519

* Totals include people whose sex was reported as transgender.

National Enteric Pathogens Surveillance System

Since 1980, the National Enteric Pathogens Surveillance System (NEPSS) has collected, analysed and disseminated 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.*

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.

NEPSS is operated by the Microbiological Diagnostic Unit, Public Health Laboratory, Department of Microbiology and Immunology, University of Melbourne; and is overseen by a Steering Committee of state, territory and commonwealth stakeholders. NEPSS can be contacted at the above address or by telephone: +61 3 8344 5701, facsimile: +61 3 8344 7833 or email joanp@unimelb.edu.au

Scientists, diagnostic and reference laboratories contribute data to NEPSS, which is supported by state and territory health departments and the Australian Government Department of Health and Ageing.

Reports to the National Enteric Pathogens Surveillance System of Salmonella infection for the period 1 April to 30 June 2005 are included in Tables 14 and 15. Data include cases reported and entered by 18 July 2005. 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 *2005;29:93–94.*

Second quarter 2005

The total number of reports to NEPSS of human *Salmonella* infection fell to 1,794 in the second quarter of 2005, 30 per cent less than in the first quarter of 2005. This decline after the summer peak is typical of seasonal trends in the incidence of salmonellosis in Australia. The second quarter count was nine per cent less than the comparable second quarter of 2004 but approximately nine per cent greater than the ten-year historical mean for this period.

During the second quarter of 2005, the 25 most common *Salmonella* types in Australia accounted for 1,168 cases, 65 per cent of all reported human *Salmonella* infections. Nineteen of the 25 most common *Salmonella* infections in the second quarter of 2005 were among the 25 most commonly reported in the first quarter of 2005.

S. Typhimurium 170 (and the related *S*. Typhimurium 108) was the most common serovar/phage type. Two-thirds of cases were from New South Wales. *S*. Typhimurium 197 was less common than in the first quarter (when a large outbreak occurred in Victoria) but counts remain well above historical averages, particularly in Queensland and New South Wales.

Reports of other salmonellae with recent increases and counts that remain above historical averages include *S*. Hvittingfoss (in the eastern States, particularly Queensland), *S*. Aberdeen (in Queensland), and *S*. Corvallis and *S*. Enteritidis 6a (both typically acquired overseas).

S. Typhimurium phage types 135 (widespread) and 9 (south-eastern mainland states) and *S*. Saintpaul (northern states, particularly Queensland) remain very common, each with approximately 100 reports during the quarter.

Acknowledgement: We thank scientists, contributing laboratories, state and territory health departments, and the Australian Government Department of Health and Ageing for their contributions to NEPSS.

Table 14. Reports to the National Enteric Pathogens Surveillance System of *Salmonella* isolated from humans during the period 1 April to 30 June 2005, as reported to 18 July 2005

	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total all *Salmonella* for quarter	30	483	78	635	124	36	242	166	1,794
Total contributing *Salmonella* types	15	92	37	115	47	11	83	68	213

Table 15. Top 25 *Salmonella* types identified in Australia, 1 April to 30 June 2005, by state or territory

National rank	*Salmonella* type	State or territory								Total 2nd quarter 2005	Last 10 years mean 2nd quarter	Year to date 2005	Year to date 2004
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
1	*S.* Typhimurium 170	7	129	0	20	2	1	14	5	178	47	343	379
2	*S.* Typhimurium 135	1	39	0	19	9	12	10	15	105	133	234	349
3	*S.* Saintpaul	1	4	8	69	2	1	6	11	102	87	259	234
4	*S.* Typhimurium 9	5	56	2	4	6	0	26	1	100	115	268	246
5	*S.* Hvittingfoss	5	9	2	43	0	0	16	2	77	24	132	106
6	*S.* Typhimurium 197	0	21	0	37	0	0	8	1	67	11	449	142
7	*S.* Virchow 8	1	10	3	45	1	0	1	0	61	50	163	231
8	*S.* Birkenhead	0	18	0	39	0	0	1	0	58	57	129	173
9	*S.* Aberdeen	0	4	1	41	0	0	1	0	47	30	112	72
10	*S.* Chester	1	5	4	21	5	0	3	6	45	40	118	127
11	*S.* Infantis	0	14	2	2	11	1	9	3	42	30	94	90
12	*S.* Muenchen	0	6	0	13	3	0	4	11	37	33	101	73
13	*S.* Waycross	0	4	0	29	1	0	0	0	34	28	78	89
14	*S.* Typhimurium RDNC	2	5	1	4	4	0	2	4	22	18	54	57
15	*S.* Enteritidis 6a	0	6	0	3	1	0	4	7	21	3.6	43	24
16	*S.* Stanley	0	7	1	3	1	0	2	5	19	10	34	33
17	*S.* Anatum	0	2	2	5	0	0	2	7	18	24	37	61
18	*S.* Typhimurium 12	0	9	0	1	1	0	2	5	18	18	76	188
19	*S.* Mississippi	0	2	0	0	0	13	3	0	18	18	49	53
20	*S.* Typhimurium untypable	0	4	0	3	0	0	6	5	18	16	33	11
21	*S.* Reading	0	10	1	4	0	0	3	0	18	6	29	25
22	*S.* Corvallis	1	5	0	1	4	0	6	0	17	1.2	44	23
23	*S.* Virchow 25 var 1	0	1	0	15	0	0	0	0	16	0	22	0
24	S Agona	0	2	0	7	4	0	1	1	15	16	30	52
25	*S.* Ball	0	0	15	0	0	0	0	0	15	10	28	35