Additional reports

Australian Sentinel Practices Research Network

The Australian Sentinel Practices Research Network (ASPREN) is a national surveillance system that is owned and operated by the Royal Australian College of General Practitioners and directed through the Discipline of General Practice at the University of Adelaide.

The network consists of general practitioners who report presentations on a number of defined medical conditions each week. ASPREN was established in 1991 to provide a rapid monitoring scheme for infectious diseases that can alert public health officials of epidemics in their early stages as well as play a role in the evaluation of public health campaigns and research of conditions commonly seen in general practice. Electronic data collection was established in 2006 and currently, further development of ASPREN is in progress to create an automatic reporting system.

The list of conditions is reviewed annually by the ASPREN management committee and an annual report is published. In 2008, 4 conditions are being monitored. They include influenza like illness, gastroenteritis and varicella infections (chickenpox and shingles). Definitions of these conditions are described in Surveillance systems reported in CDI, *published in* Commun Dis Intell *2008;32:135.*

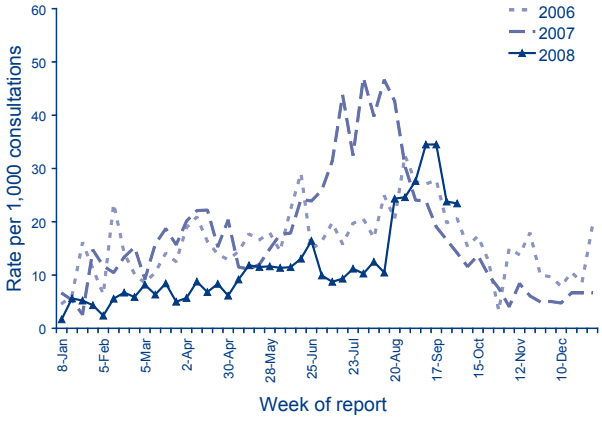
Data on influenza-like illness, gastronenteritis, chickenpox and shingles from 1 July to 30 September 2008 compared with 2007, are shown as the rate per 1,000 consultations in Figures 1, 2, 3 and 4, respectively.

Reporting period 1 July to 30 September 2008

Sentinel practices contributing to ASPREN were located in all jurisdictions other than the Northern Territory. A total of 104 general practitioners contributed data to ASPREN in the second quarter of 2008. Each week an average of 80 general practitioners provided information to ASPREN at an average of 7,804 (range 6,850 to 8,464) consultations per week.

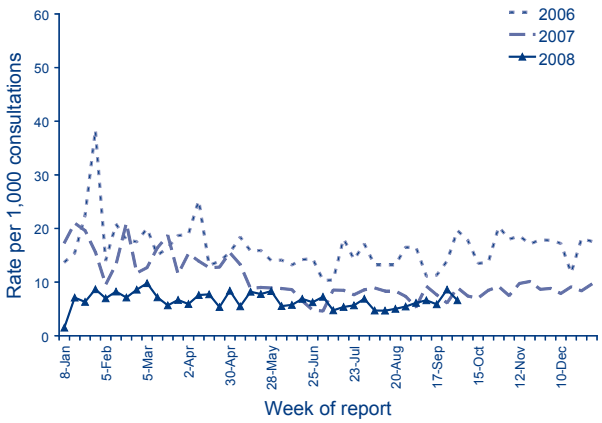
Influenza-like illness (ILI) rates reported from 1 July to 30 September 2008 were lower (9–35 cases per 1,000 consultations) compared with the same reporting period in 2007 (30–47 cases per 1,000 consultations. The rise in ILI rates in the third quarter of 2008 in mid-August occurred later compared with 2007 (beginning July). The peak ILI rate of 35 cases per 1,000 consultations occurred in mid-September (Figure 1).

Figure 1. Consultation rates for influenza-like illness, ASPREN, 1 January 2007 to 30 September 2008, by week of report



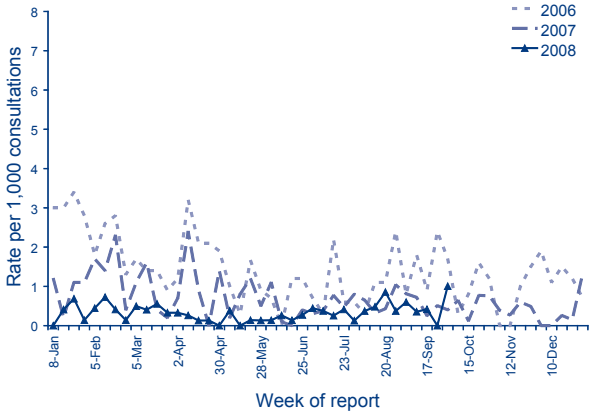
Reports of gastroenteritis from 1 July to 30 September 2008 were lower compared with the same period in 2007 (Figure 2). During this reporting period, consultation rates for gastroenteritis ranged from 5 to 9 cases per 1,000 consultations.

Figure 2. Consultation rates for gastroenteritis, ASPREN, 1 January 2007 to 30 September 2008, by week of report



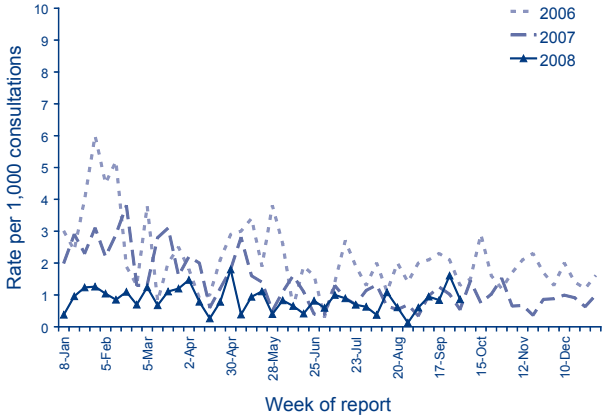
Reports of varicella infections were reported at a similar rate for the third quarter of 2008 compared with the same period in 2007. From 1 July to 30 September 2008, recorded rates for chickenpox were between 0 to 1 case per 1,000 consultations (Figure 3).

Figure 3. Consultation rates for chickenpox, ASPREN, 1 January 2007 to 30 September 2008, by week of report



In the third quarter of 2008, reported rates for shingles were between less than 1 to 1 cases per 1,000 consultations (Figure 4).

Figure 4. Consultation rates for shingles, ASPREN, 1 January 2007 to 30 September 2008, by week of report



Australian childhood immunisation coverage

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 of age for the cohort born between 1 April and 30 June 2007, at 24 months of age for the cohort born between 1 April and 30 June 2006, and at 5 years of age for the cohort born between 1 April and 30 June 2002 according to the National Immunisation Program Schedule. However from March 2002 to December 2007, coverage for vaccines due at 4 years of age was assessed at the 6-year milestone age.

For information about the Australian Childhood Immunisation Register see Surveillance systems reported in CDI, *published in* Commun Dis Intell *2008;32:134–135 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 at telephone: +61 2 9845 1435, Email: brynleyh@chw.edu.au

'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 *Haemophilus influenzae* type b (Hib) vaccine, and 2 or 3 doses of hepatitis B vaccine. 'Fully immunised' at 24 months of age is defined as a child having a record on the ACIR of 3 or 4 doses of a DTP-containing vaccine, 3 doses of polio vaccine, 3 or 4 doses of Hib vaccine, 2 or 3 doses of hepatitis B vaccine and 1 dose of a measles, mumps and rubella-containing (MMR) vaccine. 'Fully immunised' at 5 years of age is defined as a child having a record on the ACIR of 4 or 5 doses of a DTP-containing vaccine, 4 doses of polio vaccine, and 2 doses of an MMR-containing vaccine.

Immunisation coverage for children 'fully immunised' at 12 months of age for Australia remained unchanged at 91.2% (Table 1). The only important changes in coverage for any individual vaccines due at 12 months of age occurred in the Northern Territory, where coverage for all vaccines decreased by 2 percentage points and fully immunised coverage dropped just below 90% for the 1st time since mid-2004.

Immunisation coverage for children 'fully immunised' at 24 months of age for Australia decreased by 0.3 of a percentage point to 92.5 (Table 2). There were no important changes in coverage for any individual vaccines due at 24 months of age or by jurisdiction.

Immunisation coverage for 'fully immunised' at 5 years of age for Australia decreased for the third consecutive quarter, by 0.5 of a percentage point, to 86.8% (Table 3). Coverage for all individual vaccines also decreased by 0.6 of a percentage point for Australia, however there were no important changes in coverage for any jurisdiction. This decrease in coverage is likely due to the change in the coverage calculation algorithm, which, since the beginning of 2008, now calculates coverage for vaccines due at 4 years of age at the 5-year milestone, not the 6-year milestone. This means late immunisations given to a child aged between 5 and 6 years are no longer included in the assessment.

Figure 5 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 few years for all age groups. However, there is a noticeable dip in recent coverage labelled at 6 years of age after a second consecutive quarterly decrease due to the abovementioned change in the coverage calculation algorithm. It should also be noted that, currently, coverage for the vaccines added to the NIP since 2003 (Varicella at 18 months, Meningococcal C conjugate at 12 months and Pneumococcal conjugate at 2, 4, and 6 months) are not included in the 12 or 24 months coverage data respectively.

Table 1. Percentage of children immunised at 1 year of age, preliminary results by disease and state or territory for the birth cohort 1 April to 30 June 2007; assessment date 30 September 2008

Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,145	24,196	996	15,320	4,695	1,524	17,163	7,387	72,426
Diphtheria, tetanus, pertussis (%)	94.1	91.8	90.3	91.4	92.1	91.8	92.7	90.5	91.8
Poliomyelitis (%)	94.0	91.8	90.3	91.4	92.1	91.8	92.7	90.5	91.8
Haemophilus influenzae type b (%)	96.0	94.8	93.8	93.8	94.3	95.3	94.7	94.3	94.5
Hepatitis B (%)	95.6	94.8	94.2	93.6	94.2	95.2	94.5	94.2	94.4
Fully immunised (%)	93.5	91.5	89.8	90.7	91.4	91.6	91.6	90.0	91.2
Change in fully immunised since last quarter (%)	-0.1	+0.2	-1.8	-0.1	+0.4	+0.6	-0.3	-0.1	-0.0

Table 2. Percentage of children immunised at 2 years of age, preliminary results by disease and state or territory for the birth cohort 1 April to 30 June 2006; assessment date 30 September 2008*

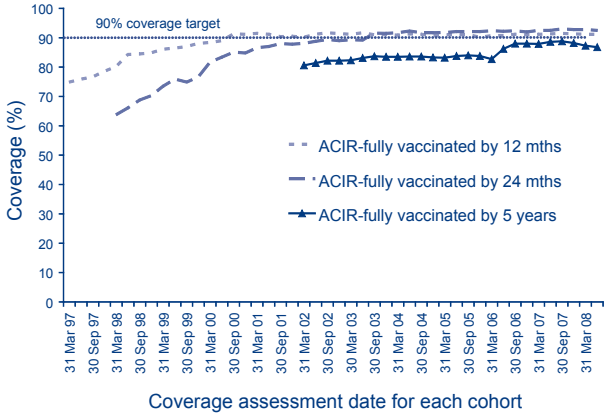
Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,137	22,861	946	14,549	4,518	1,403	16,684	7,154	69,252
Diphtheria, tetanus, pertussis (%)	97.2	94.8	95.9	94.5	94.5	95.4	95.5	93.7	94.8
Poliomyelitis (%)	97.2	94.7	95.9	94.4	94.5	95.2	95.4	93.7	94.8
Haemophilus influenzae type b (%)	97.0	95.2	94.3	93.4	93.3	95.4	94.4	93.5	94.4
Measles, mumps, rubella (%)	96.1	93.7	95.2	93.5	93.4	94.4	94.6	92.9	93.9
Hepatitis B (%)	97.4	95.6	97.2	95.1	95.1	95.9	95.9	94.4	95.5
Fully immunised (%)	94.9	92.4	93.6	91.9	92.4	93.5	93.4	91.2	92.5
Change in fully immunised since last quarter (%)	+0.1	-0.0	-1.2	-0.7	-0.9	+0.1	-0.3	+0.0	-0.3

* The 12 months age data for this cohort was published in *Commun Dis Intell* 2007;31:348.

Table 3. Percentage of children immunised at 5 years of age, preliminary results by disease and state or territory for the birth cohort 1 April to 30 June 2003; assessment date 30 September 2008

Vaccine	State or territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	998	22,128	937	13,897	4,482	1,362	15,877	6,719	66,400
Diphtheria, tetanus, pertussis (%)	91.3	86.5	87.1	87.2	86.2	89.7	90.6	84.3	87.5
Poliomyelitis (%)	91.2	86.3	87.0	87.1	86.0	89.8	90.5	84.2	87.4
Measles, mumps, rubella (%)	90.7	86.1	87.1	86.9	86.2	89.7	90.3	84.2	87.2
Fully immunised (%)	90.6	85.7	86.5	86.4	85.7	89.2	89.9	83.4	86.8
Change in fully immunised since last quarter (%)	+1.7	-0.7	-1.5	-0.9	+1.6	-0.6	-0.5	-0.7	-0.5

Figure 5. Trends in vaccination coverage, Australia, 1997 to 30 June 2008, 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 *2008;32:134.*

Reporting period 1 April to 30 June 2008

The AGSP laboratories received a total of 854 isolates in this quarter, a slight increase over the 823 isolates seen in the corresponding period in 2007. Of these, 831 remained viable for susceptibility testing. About 26.5% of this total was from New South Wales, 17% from Victoria, 16% from South Australia, 15% from Queensland, 13% from Western Australia and 11% from the Northern Territory. There was a single isolate from the Australian Capital Territory and 3 from Tasmania. There was a decline in numbers examined in some states but a large increase in South Australia.

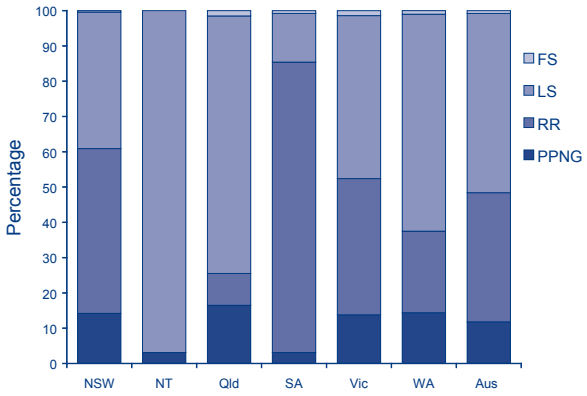
Penicillins

In this quarter, 402 (48.4%) of all isolates examined were penicillin resistant by one or more mechanisms. Ninety-eight (11.8%) were penicillinase-producing *Neisseria gonorrhoeae* (PPNG) and 304 (36.6%) resistant by chromosomal mechanisms, (CMRP). These proportions were greatly increased from those recorded in this quarter in 2007, when 259 (32.1%) of 806 isolates examined nationally were penicillin resistant. PPNG increased from the 79 (9.8%) seen in 2007, and CMRP from 180 (22.3%) isolates in 2007. The proportion of all strains resistant to the penicillins by any mechanism ranged from 3% in the Northern Territory to 85.4% in South Australia. High rates of penicillin resistance were also found in New South Wales (61%), Victoria (52.4%), Western Australia (37.5%) and Queensland (25.5%).

Figure 6 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 $\leq$ 1 mg/L)

or else PPNG aggregated for Australia and by state and territory. A high proportion of those strains classified as PPNG or CMRP will fail to respond to treatment with penicillins (penicillin, amoxycillin, ampicillin) and early generation cephalosporins.

Figure 6. Categorisation of gonococci isolated in Australia, 1 April to 30 June 2008, 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.*

Most of the resistance in South Australia was related to CMRP—107, comprising 82.3% of isolates—whereas only 4 (3.1%) isolates were PPNG. In New South Wales and Victoria most of the penicillin resistance was also due to CMRP. In New South Wales 105 (46.7%) isolates were CMRP with 32 PPNG (14.2%) and in Victoria 56 (38.6%) were CMRP and 20 (13.8%) PPNG. In Western Australia 24 CMRP were detected accounting for 23% of isolates with 15 PPNG accounting for 14.4% of isolates. In Queensland, PPNG were more prominent (16.5%, 21 isolates) with 9% CMRP. Three PPNG were noted in both Tasmania and the Northern Territory, but no CMRP were detected. The single isolate from the Australian Capital Territory was chromosomally resistant.

Ceftriaxone

Five isolates with decreased susceptibility to ceftriaxone (MIC 0.06 and 0.12 mg/L) were detected, one each in Queensland and South Australia and three in New South Wales.

Spectinomycin

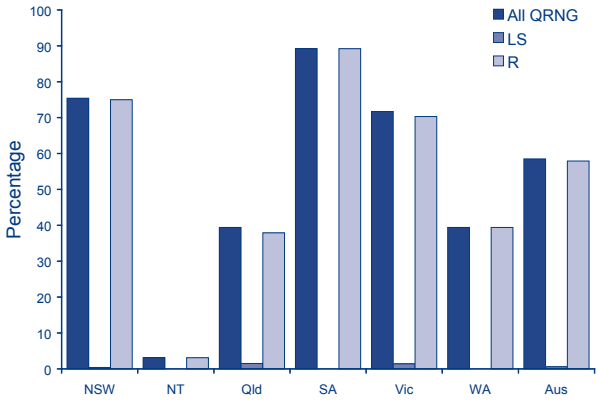
All isolates were susceptible to this injectable agent.

Quinolone antibiotics

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.

A total of 486 quinolone resistant *N. gonorrhoeae* (QRNG) were detected during this quarter and represented 58.5% of all gonococci tested nationally. This was a further increase in the proportion of QRNG when compared with the 44.5% in this quarter in 2007, 33.7% in 2006 and 30% in 2005. The great majority of QRNG in the current period (99%) continued to exhibit higher-level resistance (ciprofloxacin MICs 1mg/L or more) (Figure 7).

Figure 7. The distribution of quinolone resistant isolates of *Neisseria gonorrhoeae* in Australia, 1 April to 30 June 2008, by jurisdiction



LS QRNG Ciprofloxacin MICs 0.06–0.5 mg/L.

R QRNG Ciprofloxacin MICs ≥1 mg/L.

QRNG were detected in all states and territories. The highest proportion of QRNG was present in South Australia where 116 QRNG accounted for 89.2% of all isolates. A high number (169) and proportion (75%) of QRNG were also found in New South Wales, Victoria (104 QRNG, 72%), Queensland (49 QRNG, 39%), and Western Australia (41 QRNG, 39%). Three isolates from Tasmania and the Northern Territory were QRNG as was the single strain from the Australian Capital Territory.

High level tetracycline resistance

The number (145) of high level tetracycline resistance (TRNG) detected this quarter was greater than the 121 found in the corresponding quarter in 2007 and represented 17.5% of all isolates. The

highest proportion of TRNG in any jurisdiction (37%) was in Western Australia and the highest number (44) was detected in New South Wales. TRNG were present in all states and territories except 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

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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 *2008;32:135.*

Laboratory confirmed cases of invasive meningococcal disease for the period 1 July to 30 September 2008, are included in this issue of Communicable Diseases Intelligence *(Table 4).*

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 authori-

Table 4. Number of laboratory confirmed cases of invasive meningococcal disease, Australia, 1 July to 30 September 2008, by serogroup and state or territory

State or territory	Year	Serogroup													
		A		B		C		Y		W135		ND		All	
		Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD
Australian Capital Territory	08			0	2	1	1							1	3
	07			1	3						1			1	4
New South Wales	08			14	27	1	4	1	3	1	2			17	36
	07			35	52	1	7	2	4	0	1	3	7	41	70
Northern Territory	08			3	3	0	2							3	5
	07			0	1	0	1							0	2
Queensland	08			11	52	2	4					11	11	24	67
	07			24	43	4	5	1	1	2	2		1	31	52
South Australia	08			5	12					1	1			6	13
	07			5	9	1	1					1	1	7	11
Tasmania	08													0	0
	07			2	2			1	1		1			3	5
Victoria	08			20	44	1	1	0	1			3	6	24	52
	07			14	35	0	2	1	4	1	2	3	4	19	47
Western Australia	08			8	16							0	1	8	17
	07			8	15									8	15
Total	08			61	156	5	12	1	4	2	3	14	18	83	193
	07			89	160	6	16	5	10	3	6	7	13	110	205

ties 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 3 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 2008, as reported to 30 June 2008, are included in this issue of Communicable Diseases Intelligence *(Tables 5 and 6).*

Table 5. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 January to 31 March 2008, 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 2008	This period 2007	YTD 2008	YTD 2007
HIV diagnoses	Female	0	11	0	5	2	1	6	3	28	33	28	33
	Male	5	85	0	43	9	3	68	10	223	253	223	253
	Not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total*	5	96	0	48	11	4	74	13	251	286	251	286
AIDS diagnoses	Female	0	1	0	0	0	0	1	0	2	3	2	3
	Male	1	8	1	7	1	0	16	2	36	35	36	35
	Total*	1	9	1	7	1	0	17	2	38	38	38	38
AIDS deaths	Female	0	1	0	0	0	0	0	0	1	0	1	0
	Male	0	4	0	1	0	0	3	0	8	15	8	15
	Total*	0	5	0	1	0	0	3	0	9	15	9	15

* Totals include people whose sex was reported as transgender.

Table 6. Cumulative diagnoses of HIV infection, AIDS, and deaths following AIDS since the introduction of HIV antibody testing to 31 March 2008, and reported by 30 June 2008, by sex and state or territory

	Sex	State or territory								Australia
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	32	939	23	303	113	13	406	224	2,053
	Male	274	13,908	137	2,940	988	115	5,569	1,284	25,215
	Not reported	0	228	0	0	0	0	22	0	250
	Total*	306	15,105	160	3,252	1,102	128	6,019	1,515	27,587
AIDS diagnoses	Female	10	264	4	73	32	4	117	42	546
	Male	94	5,520	46	1,062	413	55	2,068	436	9,694
	Total*	104	5,802	50	1,137	446	59	2,198	480	10,276
AIDS deaths	Female	7	139	1	43	20	2	64	29	305
	Male	73	3,601	30	677	280	33	1,429	299	6,422
	Total*	80	3,751	31	722	300	35	1,502	329	6,750

* 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. Communicable Diseases Intelligence *NEPSS quarterly reports include only* Salmonella. *NEPSS receives reports of* Salmonella *isolates that have been serotyped and phage typed by the 5* Salmonella *typing laboratories in Australia.* Salmonella *isolates are submitted to these laboratories for typing by primary diagnostic laboratories throughout Australia.*

A case is defined as the isolation of a Salmonella *from an Australian resident, either acquired locally or as a result of overseas travel, including isolates detected during immigrant and refugee screening. Second and subsequent identical isolates from an individual within 6 months are excluded, as are isolates from overseas visitors to Australia. The date of the case is the date the primary diagnostic laboratory isolated* Salmonella *from the clinical sample.*

Quarterly reports include historical quarterly mean counts. These should be interpreted cautiously as they may be affected by outbreaks and by surveillance artefacts such as newly recognised and incompletely typed Salmonella.

NEPSS may be contacted at the Microbiological Diagnostic Unit, Public Health Laboratory, Department of Microbiology and Immunology, The University of Melbourne; 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 July to 30 September 2008 are included in Tables 7 and 8. Data include cases reported and entered by 21 October 2008. 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 *2008;32:137.*

Reporting period 1 July to 30 September 2008

There were 1,018 reports to NEPSS of human *Salmonella* infection in the third quarter of 2008, approximately 40% fewer than in the second quarter of 2008. Limited third quarter data from Western Australia were available at the time of preparing this report. Taking this into account, the overall count of cases for the remainder of Australia was similar to the recent historical mean number of reports for this time of each year. The nadir in the annual cycle of human salmonellosis in Australia typically occurs in August–September.

During the third quarter of 2008, the 25 most common *Salmonella* types in Australia accounted for 617 cases, 61% of all reported human *Salmonella* infections. Sixteen of the 25 most common *Salmonella* infections in the third quarter of 2008 were also among those most commonly reported in the preceding quarter.

The most conspicuous feature of the national data was the predominance of various phage types of *S.* Typhimurium, which comprised 6 of the 8 most common salmonellae. Among these, the increase in *S.* Typhimurium phage type 9 above the historical average was due to increased cases in New South Wales, Victoria and South Australia. The increase in *S.* Typhimurium phage type 44 was mostly due to cases in Victoria and New South Wales. Increases of *S.* Typhimurium phage type 29 (mostly in Queensland and South Australia) and *S.* Typhimurium phage type 193 (South Australia) were more geographically restricted. *S.* Stanley was moderately elevated (most cases in New South Wales and Victoria).

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 7. Reports to the National Enteric Pathogens Surveillance System of *Salmonella* isolated from humans during the period 1 July to 30 September 2008, as reported to 21 October 2008

	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA*	Australia
Total all *Salmonella* for quarter	23	324	58	211	130	13	249	10	1,018
Total contributing *Salmonella* types	16	89	30	74	54	10	87	5	179

* Limited third quarter data from Western Australia were available at the time of preparing this report.

Table 8. Top 25 *Salmonella* types identified in Australia, 1 July to 30 September 2008, by state or territory

National rank	*Salmonella* type	State or territory								Total 3rd quarter 2008	Last 10 years mean 3rd quarter	Year to date 2008	Year to date 2007
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
1	*S.* Typhimurium PT 9	4	44	2	9	12	0	25	0	96	63	364	608
2	*S.* Typhimurium PT 135	0	20	1	16	5	0	17	0	59	96	724	528
3	*S.* Typhimurium PT 44	0	18	0	13	1	0	24	0	56	11	282	332
4	*S.* Typhimurium PT 170	2	34	0	6	0	0	13	0	55	28	223	224
5	*S.* Stanley	2	13	0	2	3	1	13	0	34	21	88	100
6	*S.* Virchow PT 8	0	4	7	12	1	0	2	0	26	30	146	184
7	*S.* Typhimurium PT 29	0	3	2	9	11	0	0	0	25	1.8	62	136
8	*S.* Typhimurium untypable	1	5	0	4	9	0	5	0	24	10	60	69
9	*S.* Enteritidis PT 6a	0	5	0	5	2	2	8	0	22	12	49	55
10	*S.* Infantis	0	8	0	3	7	0	2	0	20	27	143	145
11	*S.* Saintpaul	0	3	4	8	1	1	2	0	19	49	186	280
12	*S.* Chester	0	1	3	8	2	0	4	0	18	22	112	127
13	*S.* Enteritidis PT 1	1	3	0	1	2	0	8	1	16	9	41	22
14	*S.* Birkenhead	1	12	0	1	0	0	0	0	14	23	142	163
15	*S.* Weltevreden	0	4	2	2	2	0	4	0	14	10	71	49
16	*S.* Typhimurium PT 193	0	0	1	0	12	0	1	0	14	4.3	37	42
17	*S.* Anatum	0	6	5	0	1	0	1	0	13	12	62	60
18	*S.* Typhimurium PT 12	0	7	0	0	2	0	4	0	13	11	41	78
19	*S.* Singapore	0	11	0	0	0	0	2	0	13	8	66	55
20	*S.* Agona	1	5	0	5	1	0	0	0	12	13	42	44
21	*S.* Aberdeen	0	0	4	8	0	0	0	0	12	12	66	107
22	*S.* Javiana	0	4	0	4	0	0	3	0	11	5	25	37
23	*S.* Montevideo	0	4	0	6	0	0	1	0	11	5	67	97
24	*S.* Typhimurium PT 197	0	3	0	5	1	0	1	0	10	19	83	158
25	*S.* Typhimurium PT 6 var 1	1	2	0	1	0	0	0	6	10	2.8	38	20

* Limited third quarter data from Western Australia were available at the time of preparing this report.