

# 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 2003, 13 conditions are being monitored, five of which are related to communicable diseases. These include influenza, gastroenteritis, antibiotic prescription for acute cough, varicella and shingles. Definitions of these conditions were published in *Commun Dis Intell* 2003;27:125–126.

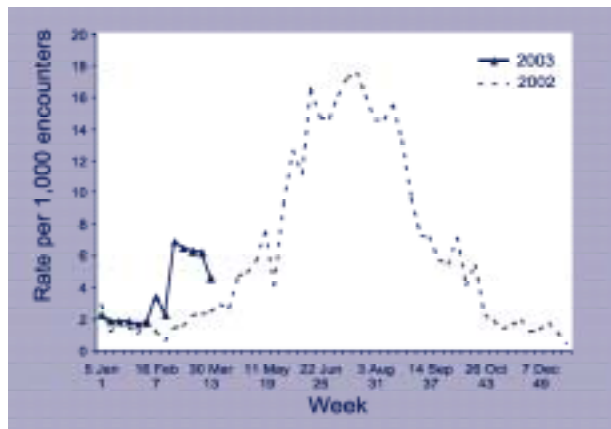
Data from 1 January to 31 March 2003 are shown as the rate per 1,000 consultations in Figures 7, 8 and 9.

## *Australian Paediatric Surveillance Unit*

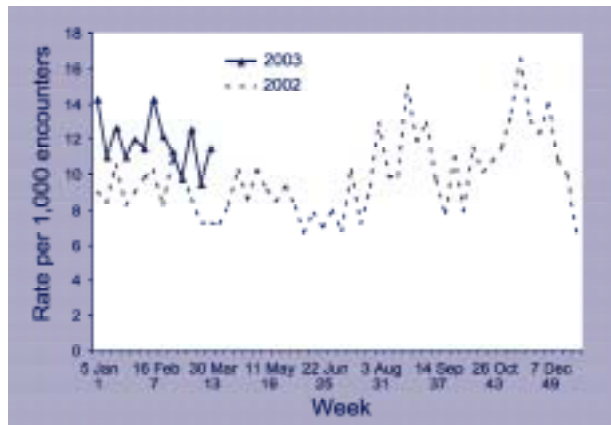
The Australian Paediatric Surveillance Unit (APSU) conducts nationally based active surveillance of rare diseases of childhood, including specified communicable diseases and complications of rare communicable diseases in children. The primary objectives of the APSU are to document the number of Australian 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 2001, over 1,000 clinicians participated in the surveillance of 15 conditions through the APSU, with an overall response rate of 98 per cent. The APSU can be contacted by telephone: +61 2 9845 2200, email: [apsu@chw.edu.au](mailto:apsu@chw.edu.au). For more information see *Commun Dis Intell* 2003;27:128–129.

The results for 1 January to 31 December 2002 are shown in Table 6.

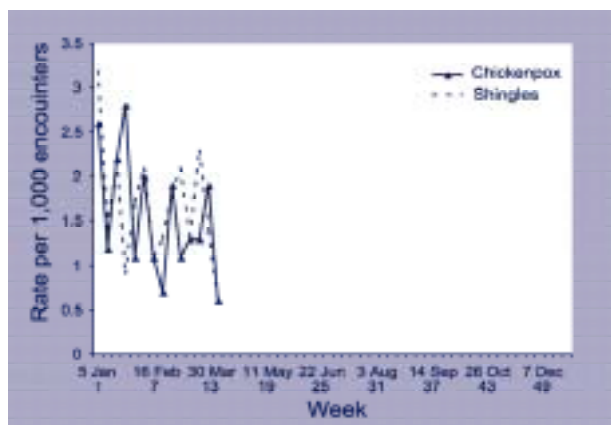
**Figure 7. Consultation rates for influenza-like illness, ASPREN, 1 January to 31 March 2003, by week of report**



**Figure 8. Consultation rates for gastroenteritis, ASPREN, 1 January to 31 March 2003, by week of report**



**Figure 9. Consultation rates for chickenpox and shingles, ASPREN, 1 January to 31 March 2003, by week of report**



**Table 6. Confirmed cases of communicable diseases reported to the Australian Paediatric Surveillance Unit between 1 January and 30 December 2002\***

Condition	Previous reporting period 2001*	Current reporting period 2002
Acute flaccid paralysis	44	28
Congenital cytomegalovirus	16	9
Congenital rubella	0	2†
Perinatal exposure to HIV	24	25
Neonatal herpes simplex virus infection	11	11

\* Surveillance data are provisional and subject to revision

† Both children born to mothers who had rubella in Indonesia. One child was born in Indonesia, one child born in Australia.

### *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* 2003;27:126.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 October to 31 December 2002, as reported to 31 March 2003, are included in this issue of *Communicable Diseases Intelligence* (Tables 7 and 8).

**Table 7. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 October to 31 December 2002, by sex and State or Territory of diagnosis**

	Sex	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Totals for Australia			
										This period 2002	This period 2001	Year to date 2002	Year to date 2001
HIV diagnoses	Female	0	10	0	8	1	0	3	3	25	26	90	96
	Male	0	102	0	40	1	0	57	12	212	179	735	692
	Not reported	0	2	0	0	0	0	0	0	2	0	3	1
	Total <sup>1</sup>	0	114	0	48	2	0	60	15	239	205	833	789
AIDS diagnoses	Female	0	2	0	0	1	0	0	0	3	5	13	20
	Male	0	16	0	8	2	1	9	2	38	43	177	168
	Total <sup>1</sup>	0	18	0	8	3	1	9	2	41	48	191	189
AIDS deaths	Female	0	2	0	1	0	0	0	0	3	4	6	14
	Male	0	11	1	3	4	1	2	0	22	18	73	83
	Total <sup>1</sup>	0	13	1	4	4	1	2	0	25	22	79	97

1. Persons whose sex was reported as transgender are included in the totals.

**Table 8. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 December 2002, by sex and State or Territory**

	Sex	State or Territory								Australia
		ACT	NSW	NT	QLD	SA	TAS	VIC	WA	
HIV diagnoses	Female	28	693	14	193	77	7	273	147	<b>1,432</b>
	Male	237	11,955	116	2,261	749	85	4,398	1,020	<b>20,821</b>
	Not reported	0	236	0	0	0	0	24	0	<b>260</b>
	Total <sup>1</sup>	265	12,909	130	2,461	826	92	4,713	1,173	<b>22,569</b>
AIDS diagnoses	Female	9	212	0	54	30	4	85	32	<b>426</b>
	Male	90	4,914	38	923	376	47	1,780	394	<b>8,562</b>
	Total <sup>1</sup>	99	5,139	38	979	406	51	1,874	428	<b>9,014</b>
AIDS deaths	Female	4	124	0	37	18	2	57	21	<b>263</b>
	Male	71	3,390	26	607	251	31	1,327	271	<b>5,974</b>
	Total <sup>1</sup>	75	3,523	26	646	269	33	1,391	293	<b>6,256</b>

1. Persons whose sex was reported as transgender are included in the totals

## *Childhood immunisation coverage*

Tables 9, 10 and 11 provide the latest quarterly report on childhood immunisation coverage from the Australian Childhood Immunisation Register.

The data show the percentage of children fully immunised at age 12 months for the cohort born between 1 October and 31 December 2001; at 24 months of age for the cohort born between 1 October and 31 December 2000; and at 6 years of age for the cohort born between 1 October and 31 December 1996, 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](mailto:brynleyh@chw.edu.au).

Immunisation coverage for 'fully immunised' at 12 months of age for Australia has decreased marginally from the last quarter by 0.3 percentage points to 91.4 per cent (Table 9). The change in 'fully immunised' coverage varied by state and territory with most jurisdictions experiencing small decreases in coverage, the exception being South Australia with a significant 1.8 per cent decrease. South Australia was also the only jurisdiction with any important changes in coverage for individual vaccines. It experienced not insignificant decreases in coverage for diphtheria, tetanus, pertussis (DTP) (–1.4%), poliomyelitis (OPV) (–1.4%) and *Haemophilus influenzae* type b (Hib) (–1.1%) vaccines. One explanation for this decrease is that the Australian Childhood Immunisation Register (ACIR) field officer for South Australia was able to focus attention on data cleaning for the 12-month cohort during the months of June, July and August 2002 but then changed the focus to the 24-month group for the following three months (M. Watson, Department of Human Services, South Australia, personal communication, 30 April 2003). This is an important example that demonstrates the value of the ACIR field officers, and the value of the continuing role of educating providers to sustain quality in recording of immunisations.

Every jurisdiction still has coverage greater than 90 per cent for all individual vaccines at 12 months of age and five jurisdictions have greater than 95 per cent coverage for hepatitis B vaccine: New South Wales (95.1%), the Northern Territory (96.1%), Queensland (95.2%), South Australia (95.4%), and Tasmania (95.1%).

Coverage measured by 'fully immunised' at 24 months of age for Australia decreased marginally from the last quarter by 0.4 percentage points to 89.0 per cent (Table 10). Coverage for individual vaccines for Australia basically remained unchanged with DTP vaccine coverage still almost three percentage points lower than coverage for the other vaccines calculated for this age group. The most important jurisdictional changes in 'fully immunised' coverage at 24 months of age occurred in Western Australia (–1.5%) and the Northern Territory (+2.0). In fact, there were some significant increases in coverage for most vaccines in the Northern Territory with coverage for DTP increasing by 1.8 per cent to 88.2 per cent, and coverage for Hib increasing by 1.6 per cent to 94.8 per cent. Western Australia had the opposite experience with significant decreases in coverage for DTP (–1.6%) and measles, mumps, rubella (–1.1%).

Table 11 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 remained unchanged from the previous quarter at 82.2 per cent. There was also very little change for the jurisdictions, with the exception of Tasmania who experienced the only significant change in 'fully immunised' coverage at this age, a 2.2 per cent increase. Coverage for individual vaccines for Australia and the jurisdictions for this age group also showed little change.

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.

**Table 9. Proportion of children immunised at 1 year of age, preliminary results by vaccine and state or territory for the birth cohort 1 October to 31 December 2001; assessment date 31 March 2003**

Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Number of children	932	20,818	860	11,913	4,302	1,449	15,031	5,888	<b>61,193</b>
Diphtheria, tetanus, pertussis (%)	91.9	92.5	91.5	92.9	92.6	93.9	93.1	91.1	<b>92.6</b>
Poliomyelitis (%)	91.5	92.4	91.1	92.8	92.5	93.8	93.0	91.1	<b>92.5</b>
<i>Haemophilus influenzae</i> type b (%)	93.9	94.5	95.4	94.5	94.8	95.2	95.1	94.4	<b>94.7</b>
Hepatitis B (%)	94.1	95.1	96.1	95.2	95.4	95.1	94.9	94.1	<b>95.0</b>
<b>Fully immunised (%)</b>	90.1	91.3	90.8	91.8	91.4	92.8	91.9	90.1	<b>91.4</b>
Change in fully immunised since last quarter (%)	+0.8	-0.1	+0.4	-0.0	-1.8	-0.2	-0.5	+0.2	<b>-0.3</b>

**Table 10. Proportion of children immunised at 2 years of age, preliminary results by vaccine and state or territory for the birth cohort 1 October to 31 December 2000; assessment date 31 March 2003<sup>1</sup>**

Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Number of children	1,072	21,673	787	12,219	4,305	1,553	15,458	5,960	<b>63,027</b>
Diphtheria, tetanus, pertussis (%)	89.5	90.8	88.2	91.8	91.7	93.6	92.0	89.6	<b>91.2</b>
Poliomyelitis (%)	94.2	94.6	96.8	94.6	95.3	96.7	95.7	93.8	<b>94.9</b>
<i>Haemophilus influenzae</i> type b (%)	93.8	93.5	94.8	94.0	94.5	96.0	94.8	92.6	<b>94.0</b>
Measles, mumps, rubella (%)	93.8	93.7	95.4	94.0	94.7	95.8	95.2	92.7	<b>94.2</b>
Hepatitis B (%)	94.9	95.4	98.1	95.2	96.0	97.4	96.3	95.0	<b>95.7</b>
<b>Fully immunised (%)<sup>1</sup></b>	86.8	88.0	87.0	89.7	90.0	92.9	90.0	87.3	<b>89.0</b>
Change in fully immunised since last quarter (%)	-0.7	-0.4	+2.0	-0.6	+0.5	+0.5	-0.1	-1.5	<b>-0.4</b>

1. The 12 months age data for this cohort were published in Commun Dis Intell 2002;26:309.

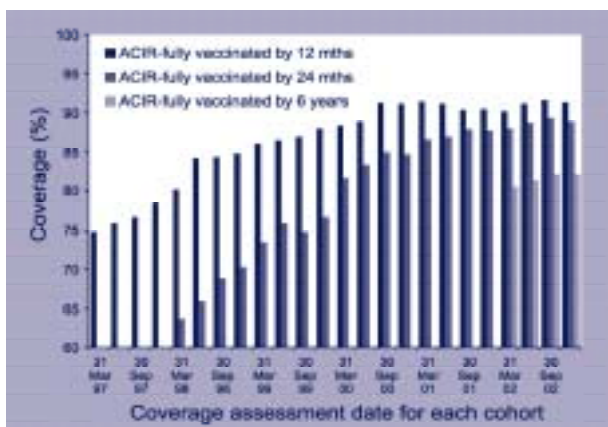
2. These data relating to 2 year-old children should be considered as preliminary. The proportions shown as 'fully immunised' appear low when compared with the proportions for individual vaccines. This is at least partly due to poor identification of children on immunisation encounter forms.

**Table 11. Proportion of children immunised at 6 years of age, preliminary results by vaccine and state or territory for the birth cohort 1 October to 31 December 1996; assessment date 31 March 2003**

Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Number of children	1,122	22,333	16,393	12,531	4,738	6,525	1,632	765	<b>66,039</b>
Diphtheria, tetanus, pertussis (%)	83.5	83.6	86.7	83.8	83.0	81.9	85.7	83.5	<b>84.3</b>
Poliomyelitis (%)	83.6	83.7	87.0	84.0	83.3	82.2	86.1	85.4	<b>84.5</b>
<i>Haemophilus influenzae</i> type b (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
Measles, mumps, rubella (%)	83.4	82.0	86.7	83.7	82.1	81.8	84.8	84.3	<b>83.6</b>
Hepatitis B(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
<b>Fully immunised (%)<sup>1</sup></b>	81.8	80.5	85.4	82.3	80.8	79.9	83.8	82.2	<b>82.2</b>
Change in fully immunised since last quarter (%)	-0.1	-0.3	-0.5	-0.6	-1.0	+2.2	+0.7	+0.4	<b>0.0</b>

1. 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.

**Figure 10. Trends in vaccination coverage, Australia, 1 October to 31 December, 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.

## *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 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 January to 31 March 2003 are included in Tables 11 and 12. Data include cases reported and entered by 16 April 2003. 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 2003;27:129.

### First quarter 2003

The total number of reports to the National Enteric Pathogens Surveillance System of human *Salmonella* infection increased to 2,461 in the first quarter of 2003, 59 per cent more than the fourth quarter of 2002, but a similar

count to the first quarter of 2002. Each year, the highest number of cases is reported in the first quarter.

During the first quarter of 2003, the 25 most common *Salmonella* types in Australia accounted for 1,690 (69%) of all reported human *Salmonella* infections.

*S. Typhimurium* phage types 135, 170 and 9, *S. Saintpaul* and *S. Chester* were the most common salmonellae. With the exception of *S. Chester*, these have been among the five most common salmonellae each quarter since the first quarter of 2002; *S. Typhimurium* phage type 135 has been the most common *Salmonella* for each of the past four quarters.

The most notable recent increase in reports has been *S. Typhimurium* phage type 197. This phage type was first reported in 1990 and was rare until October 2002. There were 75 cases in the fourth quarter of 2002 and 78 cases have been reported in the first quarter of 2003. Cases have been reported predominantly from New South Wales and Queensland.

**Table 11. Reports to the National Enteric Pathogens Surveillance System of *Salmonella* isolated from humans during the period 1 January to 31 March 2003, as reported to 16 April 2003**

Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total all <i>Salmonella</i> for quarter	35	673	68	770	120	63	537	195	<b>2,461</b>
Total contributing <i>Salmonella</i> types	19	111	29	116	50	15	92	61	<b>223</b>

**Acknowledgement:** Thanks to contributing laboratories and scientists.

Table 12. Top 25 *Salmonella* types identified in Australian States and Territories, 1 January to 31 March 2003

National rank	<i>Salmonella</i> type	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total 1st quarter 2003	Last 10 years mean 1st quarter	Year to date 2003	Year to date 2002
1	<i>S. Typhimurium</i> 135	15	86	10	54	5	3	184	20	377	197	377	273
2	<i>S. Typhimurium</i> 170	1	85	0	38	0	0	68	2	194	40	194	135
3	<i>S. Typhimurium</i> 9	0	35	0	7	14	1	56	9	122	171	122	307
4	<i>S. Saintpaul</i>	0	14	4	72	3	3	8	13	117	119	117	159
5	<i>S. Chester</i>	1	33	2	42	11	0	5	10	104	57	104	58
6	<i>S. Typhimurium</i> 197	0	38	0	31	0	0	6	3	78	1	78	4
7	<i>S. Birkenhead</i>	0	33	0	40	0	0	0	2	75	90	75	115
8	<i>S. Infantis</i>	1	34	1	5	6	3	19	2	71	46	71	42
9	<i>S. Virchow</i> 8	0	5	0	56	0	0	2	0	63	64	63	156
10	<i>S. Muenchen</i>	2	6	1	29	3	0	7	9	57	55	57	47
11	<i>S. Mississippi</i>	0	2	0	1	0	37	1	0	41	33	41	37
12	<i>S. Typhimurium</i> 12	0	13	0	15	7	0	4	0	39	9	39	22
13	<i>S. Hvitvingfoss</i>	0	7	0	25	1	0	1	0	34	23	34	64
14	<i>S. Anatum</i>	0	1	7	18	1	0	4	3	34	32	34	36
15	<i>S. Aberdeen</i>	0	1	0	32	0	0	0	0	33	37	33	70
16	<i>S. Typhimurium</i> U290	2	5	0	2	0	0	19	4	32	4	32	28
17	<i>S. Singapore</i>	0	17	0	3	3	0	1	4	28	19	28	23
18	<i>S. Waycross</i>	0	9	0	18	0	0	0	0	27	39	27	50
19	<i>S. Typhimurium</i> 44	0	12	0	9	2	0	3	0	26	31	26	13
20	<i>S. Virchow</i> 34	0	1	0	19	0	0	5	0	25	32	25	41
21	<i>S. Typhimurium</i> 4	0	18	0	0	1	3	2	0	24	18	24	33
22	<i>S. Typhimurium</i> 126	0	8	0	5	3	0	2	6	24	30	24	65
23	<i>S. Montevideo</i>	0	15	0	7	1	0	0	0	23	7	23	30
24	<i>S. Potsdam</i>	1	4	0	11	2	1	3	0	22	21	22	26
25	<i>S. Agona</i>	0	5	0	9	1	1	4	0	20	18	20	25