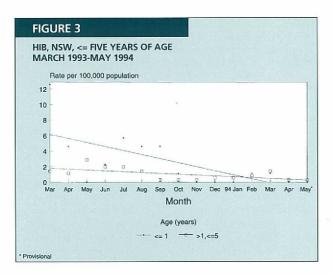
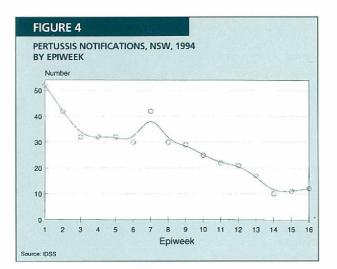
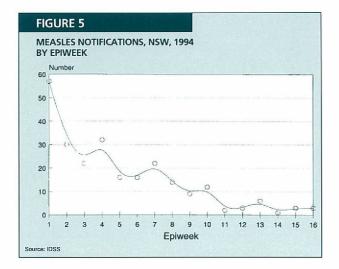
NFECTIOUS DISEASE







NOTIFICATIONS

HAEMOPHILUS INFLUENZAE TYPE B (HIB)

A total of 22 notifications for Hib disease was received for the period January to May 1994, a rate of 0.85/100,000 population. This compares with a notification rate of 3.80/100,000 population for 1992 and 2.18/100,000 for 1993. For children less than five years of age, the notification rate has decreased from 24.1/100,000 population in 1993 to 6.49/100,000 population this year. This decrease is directly attributable to the immunisation program for children aged less than five years.

PERTUSSIS (WHOOPING COUGH)

The decrease in notifications continues (Figure 4). The notification rate for pertussis for the period January to May 1994 was 17.4/100,000 population, a decrease from 20.1 for the first four months of the year.

Nineteen per cent of notifications were for children aged less than five years. A further 40 per cent of notifications were for school-aged children. These proportions have not changed since the previous reporting period. The mean age for notifications was 22.2 years (range one month to 87 years).

Four Local Government Areas (LGAs) – Sutherland, Ballina, Lismore and Grafton – have reported 20 or more notifications this year.

MEASLES

Notifications for measles continue to decrease (Figure 5). The notification rate for the period January to May 1994 was 9.76/100,000 population. This compares with a rate of 11.7 for the first four months of the year.

Four LGAs – Blacktown, Blue Mountains, Lismore and Coffs Harbour – have reported 10 or more notifications.

The mean age for notifications was 8.3 years (range three months to 64 years). Sixteen per cent of notifications were for neonates and infants (\leq one year of age). Fifty-nine per cent of notifications were for children over the age of five years, while 25 per cent were for people 12 years and older.

Measles is notifiable by medical practitioners, laboratories and hospital chief executive officers under the Public Health Act 1991. For the period January to May, 63 per cent of notifications were made by medical practitioners, 15 per cent by hospital chief executive officers, 13 per cent by laboratories and 9 per cent by other agencies (e.g. childcare facilities).

LEGIONNAIRES' DISEASE

A total of 13 notifications for Legionnaires' disease has been received this year, a rate of 0.5/100,000 population. Only two notifications were received for April 1994. Three deaths were reported to the end of May.

Seven isolates of Legionella have been recorded on the Infectious Diseases Surveillance System – five for *L pneumophila*, one for *L longbeachae* and one for *L micdadii*.

GONORRHOEA

A total of 135 notifications for gonorrhoea has been received this year, a rate of 5.3/100,000 population. This represents a 20 per cent decrease over the same period last year. Only 32 per cent of notifications were for a specific site.

MENINGOCOCCAL DISEASE

Twenty-five notifications for meningococcal disease have been received this year, a rate of 0.17/100,000 population. This represents a 29 per cent decrease over the same period last year.

Since July 1993, bacterial meningitis due to meningococcus has exceeded that due to Hib (Figure 6).

INFLUENZA SURVEILLANCE

During May data on GP sentinel surveillance were received on approximately 16,000 patient visits a week to 110 doctors through nine Public Health Units (PHUs). The percentage of total consultations for influenza-like illness remained fairly constant in most areas of NSW, with the exceptions of Western Sydney and Wentworth (WSW) which increased to 3.7 per cent, and Northern Districts (ND) which increased to 1.8 per cent. However, the average for the State is still less than 2 per cent, similar to levels at the same time last year. A level of 10 per cent may be considered an epidemic.

Data on school absentee rates are now being received from five PHUs covering more than 9,000 students in 13 schools around the State. No clear upward trend is yet discernible.

Laboratory reports show no increase this year in influenza diagnoses. Only six positive serology samples (including both influenza A and B) have been reported in the past two months by The Prince of Wales laboratory and none at Westmead ICPMR. There have been only two viral isolates of influenza A at Westmead ICPMR.

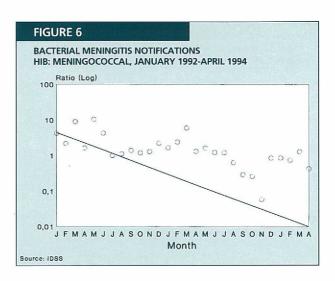
SENSITIVITY OF GONOCOCCAL ISOLATES IN SYDNEY AND NSW, JANUARY-MARCH 1994

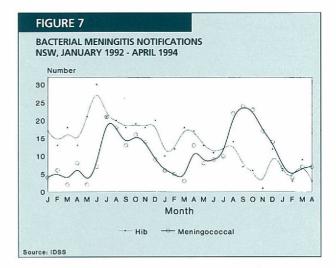
The Neisseria Reference Laboratory at The Prince of Wales Hospital examined a total of 144 isolates of Neisseria gonorrhoeae in the first quarter of 1994, a similar number to that examined in 1993 (157) and 1992 (146).

Antibiotic resistance is little different from that observed in the corresponding period in 1993, with about 40 per cent of strains having one form of penicillin resistance. The percentage of stains chromosomally resistant to penicillin continues to be high, with about 32 per cent of all isolates showing this characteristic.

Little resistance to other antimicrobial agents was seen in this group of isolates. All strains were sensitive to ceftriaxone and spectinomycin. Only three strains (2 per cent) showed high level resistance to the tetracyclines. No strains with high-level quinolone resistance were detected.

The male:female ratio of infection was 6:1, a distribution of disease seen for quite some time. Strains with decreased sensitivity to penicillin now comprise a much higher proportion of isolates from males. These appear to have displaced the fully sensitive isolates of A/S class Wt/IB2 which predominated in male patients for a number of years, although strains of this type are still circulating.





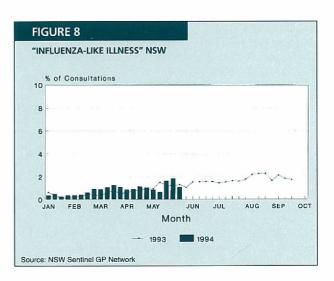


TABLE 3

INFECTIOUS DISEASE NOTIFICATIONS FOR 1994 FOR NOTIFICATIONS RECEIVED BY MAY 31, 1994 BY MONTH OF ONSET

Condition	Feb	Mar	Apr	May	Total
Adverse event				NS/ITEN	STATES!
after immunisation	5	1	4	-	10
AIDS	32	45	21	5	103
Arboviral infection	64	78	46	36	224
Foodborne illness (NOS)	6	5	64	2	77
Gastroenteritis (instit.)	11	9	47	3	70
Gonorrhoea	26	34	29	10	99
H influenzae epiglottitis	1 '	5	1	3	10
H influenzae infection (NOS)	1	1	1	1	4
H influenzae meningitis	-	2	1	1	4
H influenzae septicaemia	1	1	1	-	3
Hepatitis A – acute viral	50	49	46	22	167
Hepatitis B – acute viral	6	1	9	3	19
Hepatitis B – unspecified	291	351	281	135	1,058
Hepatitis C – acute viral	1	-	-	-	1
Hepatitis C – unspecified	709	674	526	249	2,158
Hepatitis D – unspecified	2	_	1	1	4
Hepatitis – acute viral (NOS)	1	-	-	-	1
HIV infection	47	47	28	28	150
Hydatid disease	1	1	-	-	2
Legionnaires' disease	4	4	7	_	15
Leptospirosis	2	2	-	2	6
Listeriosis	2	-	_	-	2
Malaria	25	18	13	3	59
Measles	71	34	13	10	128
Meningococcal infection (NOS)	-	-	1	1	2
Meningococcal meningitis	3	5	6	2	16
Meningococcal septicaemia	1	2	1	4	8
Mycobacterial atypical	35	35	8	1	79
Mycobacterial infection (NOS)	7	15	14	4	40
Mycobacterial tuberculosis	23	13	12	1	49
Pertussis	131	109	72	73	385
O fever	20	17	14	3	54
Rubella	7	4	1	2	14
Rubella – congenital	1		-	-	1
Salmonella (NOS)	73	77	55	24	229
Salmonella bovis morbificans	3	2	2	1	8
Salmonella typhimurium	56	54	46	5	161
Syphilis	85	103	81	25	294
Tetanus	05	105	1	1	254
Typhoid and paratyphoid	6	3	2		11
		And the second s			and the second second
Total	1,811	1,801	1,455	651	5,747
	and All Articles and	国口管理支持法法	PART ALSO	Contraction of the	1.60% P(C)

SALMONELLA

Salmonella typhimurium phage type 9

The Microbiological Diagnostic Unit (MDU), University of Melbourne, in association with the National Salmonella Surveillance Scheme has advised of a cluster of eight notifications of *Salmonella typhimurium* phage type 9 between May 6 and May 25 from five PHUs. This follows notification of an outbreak of 33 cases of S. typhimurium phage type 9 in January and February, seven of which were traced to a takeaway food outlet in the Central Sydney Area.

Salmonella subsp. 1 ser 16:lv:-

MDU has also advised of a cluster of five notifications of S. subsp. 1 ser 16:lv:- between April 13 and April 22 from three PHUs. Similar clusters have been notified in Queensland and Victoria. Investigations in Victoria have suggested a possible association with a brand of coconut. Previous veterinary isolations in Queensland have been associated with poultry layers and associated environments.

TABLE 4												
SUMMARY OF NSW INFECTIOUS I MAY 1994	DISEASE	NOTIFICA	TIONS									
Condition		Number of cases notified										
and the second	Per	iod	Cumul	ative								
	May 1993	May 1994	May 1993	May 1994								
Adverse reaction	2	-	9	14								
AIDS	23	5	168	140								
Arboviral infection	28	36	561	250								
Brucellosis	1	-	2	-								
Cholera	-	-	-	-								
Diphtheria	-	-	-	-								
Foodborne illness (NOS)	17	2	66	93								
Gastroenteritis (instit.)	64	3 10	103	71								
Gonorrhoea	24 13	10	170 70	135 27								
Haemophilus influenzae type b	66	22	294	218								
Hepatitis A Hepatitis B	303	138	1,520	1,398								
Hepatitis C	497	249	2,260	2,724								
Hepatitis D	497	245	2,200	5								
HIV infection	43	28	245	191								
Hydatid disease		-		2								
Legionnaires' disease	7	-	39	18								
Leprosy	1.1.1		-	- \								
Leptospirosis	1	2	9	7								
Listeriosis	-	-	4	4								
Malaria	12	3	79	83								
Measles	42	10	256	281								
Meningococcal infection	8	7	35	33								
Mumps	1	-	1	1								
Mycobacterial tuberculosis	28	1	161	82								
Mycobacterial – atypical	32	1	176	121								
Mycobacterial infection (NOS)	2	4	11	43								
Pertussis	30	73	211	561								
Q fever	35	3	162 177	79 23								
Rubella Salmonella infection (NOS)	28	30	511	508								
Syphilis	81	25	294	385								
Tetanus	50	1	4	2								
Typhoid and paratyphoid	2	and the second	18	12								
Typhus	2	1215										
Viral haemorrhagic fevers	-	-	- 12	-								

HEPATITIS E IN AUSTRALIA

Yellow fever

Mark J Ferson, Eastern Sydney Public Health Unit Peter W Robertson, Serology Laboratory, The Prince of Wales Hospital

The hepatitis E virus (HEV) is a recently discovered cause of acute hepatitis, which is transmitted by the faecal-oral route. The infection is marked by acute hepatitis after an incubation period of 20-40 days. There is no carrier state. Hepatitis E infection during pregnancy results in a high case-fatality rate. The virus is the most common cause of acute hepatitis in adults in Asia and Africa, and has been associated with large water-borne epidemics.

Cases described from industrialised countries have occurred in travellers returning from endemic regions. The first Australian case of acute hepatitis E was reported in Victoria in a child who had recently arrived from Pakistan¹. The diagnosis was confirmed by the presence of specific IgM in the patient's serum, detection by electron microscopy of compatible viral particles in the faeces and positive results for HEV nucleic acids in serum and faeces using the polymerase chain reaction. More recently, the diagnosis was confirmed in a Northern Territory woman who denied recent travel outside Australia; this case suggests HEV might be endemic in tropical northern Australia².

In a preliminary study to determine if HEV is a cause of acute hepatitis in Sydney, the Serology Laboratory at The Prince of Wales Hospital tested for HEV antibodies in 64 consecutive sera from patients with acute hepatitis. Four hepatitis A virus (HAV) IgM-positive and 60 HAV IgMnegative sera were tested using a commercial HEV IgG enzyme immunoassay ('HEV ELISA', Diagnostic Biotechnology, Singapore). All sera were negative for HEV-specific antibodies, suggesting HEV is unlikely to be an important cause of acute viral hepatitis in this country. However, hepatitis E should be considered in patients presenting with acute hepatitis who have recently returned from Asia, Africa or Mexico, and in whom hepatitis A, B and C, Epstein-Barr virus and cytomegalovirus infections have been excluded.

2. Bowden F, Krause V, Burrow J et al. Hepatitis E in the Northern Territory: a locally acquired case and preliminary evidence suggesting endemic disease. *Commun Dis Intell* 1994; 18:2-3.

NON-NOTIFIABLE STD SURVEILLANCE

During the 1980s Chlamydia trachomatis became the most common bacterial STD in North America and Europe, partly due to the improved control of gonorrhoea and syphilis. Sexual health clinics in NSW have noted a substantial decrease in diagnoses of chlamydia infection over the past decade. Comparison of the incidence of notifiable and non-notifiable STDs from NSW surveillance data is complicated by three factors:

- notifiable disease surveillance may be more complete at this stage, as gonorrhoea and syphilis are notifiable by all laboratories and (syphilis only) medical practitioners and hospitals, while for nonnotifiable disease surveillance, not all areas of NSW are serviced by sexual health centres (SHCs) and not all SHCs report non-notifiable STDs;
- non-notifiable STD surveillance is subject to more reporting delay; and
- different methods of surveillance may draw from different populations.

However, considering about 10 per cent of NGU is due to Chlamydia infection, it is clear this organism is still a significant public health problem in NSW. In the US Chlamydia infection has been found to be more common among women than men, but this is not reflected in NSW data.

CIGUATERA OUTBREAK, NSW, 1994

Edward Kraa, Senior Policy Adviser, NSW Health Department Brett Campbell, Food Surveillance Officer, Central Sydney Public Health Unit

Public Health Units are investigating an outbreak of ciguatera poisoning associated with Queensland spanish mackerel. Initial notification was of four cases from a party of six in the North Sydney Area. The cases had eaten homecooked fish bought from a retail outlet at Sydney Fish Markets, Pyrmont on May 21. Two cases sought hospital treatment. Subsequently three further cases were notified from the Central Sydney Area. These cases had bought

identical fish from the same retail outlet on the same day. All PHUs were notified and asked to undertake active surveillance through Accident and Emergency Units. This surveillance disclosed two further cases in the Hunter Area which had not been previously diagnosed had also bought the same fish from the same location on the same date.

Investigation at the retail outlet revealed three further cases among its staff. All cases were found to have consumed cutlets from one 21 kilogram spanish mackerel which was part of a shipment of spanish mackerel from Queensland. The distribution of the shipment to retail outlets in NSW was traced and action undertaken to ensure no fish remained on sale.

The Department issued a media release advising people who had bought spanish mackerel and then become ill to contact their PHU. One couple who had frozen cutlets of the implicated fish contacted their PHU and thereby avoided illness. Thirty additional cases were notified as a result of the press release.

Ciguatera is a naturally occurring fish toxin (lipid soluble polyether compounds) that has the potential to affect a wide variety of tropical reef fish sporadically. Ciguatera toxins are derived from dinoflagellates (Gambierdiscus toxicus) which are consumed by marine organisms. The toxins are transferred from the benthos to herbivorous species and then to carnivorous fish via marine food chains. The toxin becomes more bioconcentrated as it moves up the food chain and poisoning is usually associated with consumption of larger predatory reef fish such as barracuda, coral trout. grouper and spanish mackerel. Fish appear to be protected from the toxin. A previous outbreak in NSW in 1987 involving 64 cases was also traced to Queensland spanish mackerel.

The toxin is tasteless and heat stable. Cooking does not render the fish safe for consumption.

Initial symptoms of ciguatera poisoning are usually gastrointestinal (nausea, vomiting, watery diarrhoea and abdominal cramps) and develop 3-12 hours after consumption of fish. They are usually followed by development of neurological symptoms including paraesthesia, arthralgia, myalgia, dental pain, convulsions, muscular paralysis, audio and visual hallucinations, vertigo, severe headache, diaphoresis, loss of short-term memory and temperature perception reversals. Skin rashes on the limbs, neck and trunk often occur within a few days to a few weeks after consumption. Long-term disability is reported in severe cases with loss of energy, arthralgia, myalgia, headache and pruritus.

Consumption of alcohol can exacerbate symptoms and should be avoided even months after apparent recovery from poisoning. Studies have reported increased severity of illness following further exposure and an increase of the notification rate with age which suggests a possible accumulation of toxin in the human organism. Cases should be advised to avoid consumption of reef fish for 6-12 months.

Intravenous mannitol has been reported as being successfully used for treatment, as reported in the Med J Aust 1989, 151:77-80; 1990, 153:306-307; and 1992, 157:567.

^{1.} Moaven LD, Fuller AJ, Doultree JC et al. A case of acute hepatitis E in Victoria. Med J Aust 1993; 159:14-125.

^{1.} Capra MF, Cameron J. Ciguatera Poisoning, in Toxins and Targets,

Gambion J. Comparison of the state of the st Gillespie NC et al. Ciguatera in Australia. Med J Aust 1986; 145:584-590.

^{4.} Lewis RJ. Ciguatoxins are potent ichthyotoxins. Toxicon 1992;

^{30: 207-11.}

TABLE 5

INFECTIOUS DISEASE NOTIFICATIONS FOR 1994 FOR NOTIFICATIONS RECEIVED BY MAY 31, 1994 BY PUBLIC HEALTH UNIT

	-				A ACTING	114	Pe systim			8-1-16-1-15-		Chinapi's	Selā berti	121000				
Condition	CSA	SSA	ESA	SWS	WSA	WEN	NSA	CCA	ILL	HUN	NC	ND	NNS	CW	SW	SE	U/K	Total
Adverse event after	102000		10.00			1.5	35 50 3	101 S 2	and a state of the	ALTERNA PROPERTY		13.55			57.1		18 TAN	19 Alerta
immunisation	-	-	-	2	4	3	-	1	-	-	1	-	-	-	2	1	-	14
AIDS	25	5	47	4	23	13	10	2	5	1	3	1	-	1	-	-	-	140
Arboviral infection	-	3	-	-	-	-	6	2	4	24	158	31	11	1	8	2	-	250
Foodborne illness (NOS)	1	10	7	11	13	7	5	4	1	1	20	-	2	8	2	1	-	93
Gastroenteritis (Instit.)	12	1	-	3	3	19	-	1	-	1	-	1	-	30	-	-	-	71
Gonorrhoea	16	9	53	5	7	1	6	3	4	4	2	7	10	2	4	2	-	135
H. influenzae epiglottitis	1	2	-	-	1	2	2	2	2	-	-	-	-	-	-	-	-	12
H. influenzae infection (NOS)	-	-	-	-	1	-	1	2	1	-	1	-	-	-	-	-	-	6
H. influenzae meningitis	-	-	-	1	1	-	1	-	-	-	=	-	-	2	-	-	-	5
H. influenzae septicaemia	-	-	-	-	1	-	-	-	-	-	2	-	1	-	-	-	-	4
Hepatitis A – acute viral	10	7	23	23	21	1	15	2	3	12	23	28	3	12	35	-	-	218
Hepatitis B – acute viral	4	1	9	2	1		-	-	-	1	3	1	2	1		3	-	28
Hepatitis B – unspecified	189	169	134	325	221	11	184	18	23	35	25	12	5	6	11	2	-	1,370
Hepatitis C – acute viral Hepatitis C – unspecified	317	171	461	249	-	-	-	-			-	55			-	1	-	2 7 7 2
Hepatitis D – unspecified	317	1/1	461	249	233	60	265	83	111	166	340	55	13	71	67	60	-	2,722
Hepatitis, acute viral (NOS)	-	1	- 1	-	-	-	1	-	-	-	3	-	-	-	-	-	-	52
HIV infection	33	11	79	14	9	3	8	2	2	5	-	-		-	-	-	29	191
Hydatid disease	22		2	14	9	3	8	2	2	Э	1	-	-	-	-	-	29	2
Legionnaires' disease	2	2	1	4	3	Ξ.	2		2					1		-		18
Leptospirosis	1	-		4	2		2		2	2	3				1			7
Listeriosis	-	_	1			1			1	1	-		1					4
Malaria	11	5	10	5	6	1	19	1	4	1	7	2	<u>.</u>	1	4	6	-	83
Measles	24	5	10	15	21	25	18	ż	8	21	69	27	21	11	-	š	_	281
Meningococcal infection (NOS)	-	1	-	-	1		-	-	_		-	1			_	-	_	3
Meningococcal meningitis	2	3	2	2	3	1	_	2	-	2	1	-	_	1	1	1	_	21
Meningococcal septicaemia	-	2	-	1	1	÷.	-	1	-	2	ż	-	_	-	-	-	-	9
Mumps	-	-	-	1	-	-	-	-	-	_	-	-	-	-	-	-	_	1
Mycobacterial atypical	25	8	39	4	6	4	15	3	-	7	6	1	-	1	2	-	-	121
Mycobacterial infection (NOS)	11	-	3	-	1	1	17	1	-	2	3	-	1	-	3	-	-	43
Mycobacterial tuberculosis	12	18	6	19	12	1	1	1	3	4	3	1	-	-	1	-	-	82
Pertussis	12	36	42	27	52	17	32	8	29	37	224	11	13	13	2	6	-	561
Q fever	2	-	-	-	1	-	-	-	-	9	14	23	27	-	3	-	-	79
Rubella	-	-	2	-	5	1	4	1	-	-	4	4	-	-	2	-	-	23
Rubella – congenital	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Salmonella (NOS)	15	26	25	29	24	8	30	11	7	16	44	13	16	9	13	3	-	289
Salmonella bovis morbificans	-	1	1	1	.1	1	2	-		2	-	-	-	-	-	-	-	9
Salmonella typhimurium	18	19	12	6	44	8	25	10	14	15	3	7	4	8	16	1	-	210
Syphilis	68	28	103	50	25	3	25	3	5	1	19	16	31	4	4	-	-	385
Tetanus Trabaid 8 participaid	5	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1		2
Typhoid & paratyphoid Total	3 817	2 548	1 072	-	747	102				202	-	3	100		100	1		12
IUIAI	61/	548	1,072	806	747	192	696	167	230	382	985	247	162	183	182	94	29	7,539

TABLE 6

SURVEILLANCE OF NON-NOTIFIABLE SEXUALLY TRANSMITTED DISEASES **JANUARY-MAY 1994** (Diagnoses from sexual health centres unless otherwise stated in footnote)

* First diagnosis; 1. 01/01/94-31/03/94; 2. 01/01/94-31/01/94; 3. 01/01/94-30/04/94; 4. No data received for 1994; 5. 01/01/94-31/05/94 6. 01/01/94-28/02/94 7. No SHC in Region; 8. Laboratory and SHC data 01/01/94-31/05/94.

AHS		CSA ¹	SSA ²	ESA ³	SWS ²	WSA ⁴ + WEN	NSA ⁵	CCA ⁵	ILL ⁶	HUN ^s	NC ^s	ND ^s	WNS ³	CW'	SW ⁸	SE ⁴	Total
Infection		Real										1221-31			12 8		
Chlamydia	Male	-	-	23	1		1	-	2	6	-	4	6	-	-	-	43
trachomatis	Female	1	-	27	1	- 1819 -	1	1	2	10	1	11	12	-	4	-	71
	Total	1	-	50	2	-	2	1	4	16	1	15	18	-	4	-	114
Donovanosis	Male	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
	Female	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
*Genital herpes	Male	2	1	108	- 11		7	7	-	12	2	2	1	_	1	-	143
	Female	1	3	49	-	- 1.5	4	4	-	9	1	6	2	-	2	-	81
	Total	3	4	157	-	-	11	11	-	21	3	8	3	-	3	-	224
*Genital warts	Male	7	6	278	19	- Delater -	12	21	11	57	16	4	5	-	2	-	438
	Female	5	6	134	9	-	10	10	4	18	6	15	8	-	2	-	227
	Total	12	12	412	28	-	22	31	15	75	22	19	13	-	4	-	665
Nongonococcal	Male	2	1	215	12	-	5	18	5	27	9	6	5	-	2	-	307
urethritis	Female	-	-	-	-		2	-	-	-	-	-	2	- 1	2	-	6
	Total	2	1	215	12	-	7	18	5	27	9	6	7	-	4	-	313
Lymphogranulom	a Male	- 10	-	-	-	- 10	-	-	-	-	-	-	-	- 19 M		-	-
venereum	Female	-	-	-	-	-	-	-	-	- 12	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations used in this Bulletin: CSA Central Sydney Health Area, SSA Southern Sydney Health Area, ESA Eastern Sydney Health Area, SWS South Western Sydney Health Area, WSA Western Sydney Health Area, WEN Wentworth Health Area, NSA Northern Sydney Health Area, CCA Central Coast Health Area, ILL Illawarra Health Area, HUN Hunter Health Area, NC North Coast Health Region, ND Northern District Health Region, WNS Western New South Wales, CWR Central West Health Region, SWR South West Health Region, SER South East Health Region, OTH Interstate/Overseas, U/K Unknown, NOS Not Otherwise Stated.

Please note that the data contained in this Bulletin are provisional and subject to change because of late reports or changes in case classification. Data are tabulated where possible by area of residence and by the disease onset date and not simply the date of notification or receipt of such notification.