INFECTIOUS DISEASES

NOTIFICATION TRENDS

Notification rates were higher than historical levels in August 1995 (Figure 6) and September 1995 (Table 2) for gastroenteritis and rubella. Pertussis notifications were also elevated in August (Figure 6).

Notification trends for these conditions were discussed in the August and September issues of the *Public Health Bulletin*. Outbreaks of viral gastroenteritis have continued to be reported at unusually high levels since July by the Central Sydney, Northern Sydney, Southern Sydney, Western Sydney, Wentworth, North Coast and Hunter Public Health Units (PHUs).

HIV notifications for August were below the historical average (Figure 6). In the July 1995 issue of the *Bulletin* it was reported that HIV notifications had increased in 1995 compared with 1994. It appears the increase in notifications in the earlier months of the year has been interrupted. Notifications for the period January to June 1995 were 10 per cent higher than for the same period in 1994. However, notifications for the period January to August 1995 were only 4 per cent higher than those for the corresponding period in 1994.

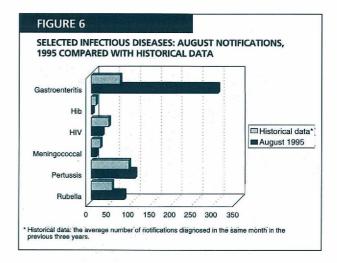
MENINGOCOCCAL DISEASE

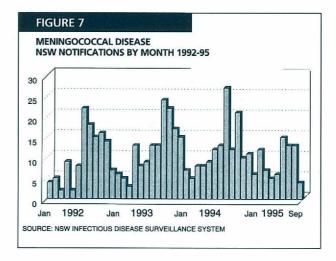
NSW experienced a seasonal increase in notifications of meningococcal disease in the winter months of 1995, but this does not appear to have continued into the spring, as has occurred in recent years (Figure 7).

Meningococcal disease is caused by infection with the bacterium Neisseria meningitidis. Transmission is by close contact with the nasopharyngeal secretions of an infected person, entering the body by inhalation. Initially the disease may present as a nasopharyngitis, associated with upper respiratory symptoms. In many cases the infection is limited to this. However, in some individuals a meningococcal bacteraemia develops, and in some cases septicaemia supervenes. The most striking feature of meningococcal septicaemia is a characteristic skin rash. Meningococcus tends to invade the walls of small blood vessels, causing their rupture and leading to haemorrhages. This results in widespread skin petechiae and ecchymoses. In other cases a meningeal infection (meningitis) develops. Case fatality rates in industrialised countries have been quoted as 7 per cent for meningitis and 19 per cent for septicaemia. But in many cases infection is asymptomatic, as susceptibility to clinical disease is low and decreases with age.

Sixty-five per cent of NSW meningococcal infection notifications since 1992 were for meningitis, 24 per cent were for septicaemia and 11 per cent were for unspecified disease. Fifty-one per cent of notifications were for children aged 0-4 years, 13 per cent were for the 5-14 age group and 21 per cent were for young people aged 15-19 years. No meningococcal outbreaks (defined as two or more related cases) have been reported so far in 1995.

Meningococcal disease is notifiable by hospitals and laboratories. To assist the prompt response to a case, it is requested that notification be by telephone. The NSW Health Department's response protocol includes the administration of chemoprophylaxis to household contacts and others with a high risk of exposure to the patient's oral secretions. If the patient attends a child care facility,





chemoprophylaxis should be offered to staff and other children at the facility.

Immunisation of contacts is considered during outbreaks caused by *Neisseria meningitidis* serogroups A or C. No vaccine exists for serogroup B.

FOODBORNE OUTBREAKS

The Central Coast PHU is investigating a notification of at least 20 cases of illness following a function attended by 65 people in October 1995. At the time of writing, 19 people who attended the function had been interviewed, 16 of whom had been ill with symptoms of vomiting, diarrhoea, nausea and abdominal cramps. The meal at the function consisted of barbecued chicken (bought cooked) and homemade salads.

A joint investigation is being undertaken by the Western and South Western Sydney PHUs following notification of 40 cases of illness after a private function. The function, attended by about 60 people, was in September 1995 in the Western Sydney Area, with food provided by a caterer from

Continued on page 114 ▶

Infectious diseases

► Continued from page 113

South Western Sydney. A range of spit-roasted meats, salads and desserts was consumed. Food Surveillance Officers were able to obtain left-over roast lamb from a garbage bin and *Clostridium perfringens* was isolated from this sample. To date 40 mailed questionnaires have been returned by guests at the function. Preliminary analysis of data suggests the onset and pattern of symptoms were consistent with *C perfringens* food poisoning. Spit-roasted lamb was the only food associated with a significantly elevated risk of illness.

Previous investigations of foodborne outbreaks associated with spit roast caterers in NSW have found that large portions of meat are often partially cooked at the premises of the caterer, some time before the function. The cooked meat is stored at ambient temperatures and later transported to the function site, where it is reheated and served. These handling procedures allow germination and growth of heat-resistant endospores of *C perfringens*. Subsequent reheating has not been sufficient to prevent the biological activity of the enterotoxin, which is responsible for the symptoms associated with *C perfringens*.

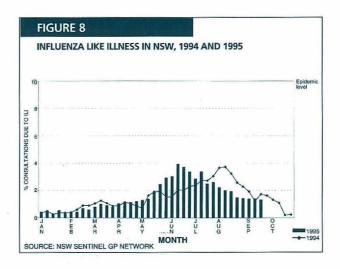
Large meat portions should be thoroughly cooked and preferably eaten immediately. If storage is necessary, meat should be rapidly chilled to below five degrees Celsius. Before serving, meat should be reheated to a minimum core temperature of 60 degrees Celsius for 10 minutes.

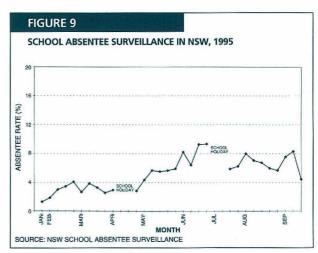
INFLUENZA SURVEILLANCE

Influenza-like illness (ILI) activity has been decreasing since mid-August (Figure 8).

The ILI consultation rate reported by the NSW General Practitioner Sentinel Network for the third week of September 1995 was 1.3 per cent (similar to that of the previous four weeks). During September this included data from an average of 75 doctors a week and the average number of patient encounters was 10,000 a week. The Western Sector PHU (covering Western Sydney and Wentworth Areas) has reported the highest rates since mid-August.

Six PHUs covering 17 schools and about 12,000 pupils have been participating in surveillance of school absentee rates. The rate for the third week of September 1995 was a moderate 4.5 per cent (Figure 9).





Laboratory reports were also low for September. The Serology Department of the Prince of Wales Hospital and the Westmead Institute of Clinical Pathology and Medical Research reported a total of 20 influenza A and 5 influenza B serology specimens. Virology reports from the Westmead ICPMR, the Virology Departments of The Prince of Wales Hospital, Royal Alexandra Hospital for Children and Liverpool Hospital totalled 1 isolate of influenza A, 5 of influenza B, 40 of respiratory syncytial virus, 16 of parainfluenza 3, 4 of rhinovirus and 8 of adenorespiratory virus.

TABLE 4	
Immunisation	Rate (per cent)
Diphtheria-tetanus-pertussis	76.8
Sabin polio	89.5
Measles-mumps-rubella	92.6
Haemophilus influenza type b	20.0*
Overall	73.0

*Of the 370 children, only 25 were born after the introduction of Haemophilus influenza type b (Hib) vaccine on May 1, 1993, and of these only 20 per cent were fully immunised against Hib. A voluntary catch-up program was conducted for children under 5 years of age and 48 children in the sample (13.9 per cent) were fully immunised with Hib as a result.

STATEWIDE SENTINEL IMMUNISATION SURVEILLANCE

Under the Public Health Act 1991 directors of child care facilities are required to keep registers of the immunisation status of every enrolled child. A cluster sampling method has been developed, staggered throughout the year, to collect data from these registers on a total of 884 children aged 25-36 months, or about 1 per cent of the NSW population in that age range. Immunisation rates of the 370 children sampled between January and August 1995 were as follows (children with missing immunisation records were recorded as not immunised).

Updated results from the 1995 surveillance are published quarterly. $\,$

TABLE 5

INFECTIOUS DISEASE NOTIFICATIONS FOR NSW, 1995 BY SELECTED MONTH OF ONSET RECEIVED BY SEPTEMBER 30, 1995

Condition	Jun	Jul	Aug	Sep	Tota
Adverse event after					
immunisation	4	3	3	1	11
AIDS	31	14	8	4	57
Arboviral infection	25	12	13	5	55
Cholera	-	1	-	-	1
Foodborne illness (NOS)	9	14	5	3	31
Gastroenteritis (instit.)	12	184	303	113	612
Gonorrhoea infection	32	14	23	5	74
H. influenzae epiglottitis	-	-	1	1	
H. influenzae meningitis	2	2		1	!
H. influenzae septicaemia	-	-	2	-	
Hepatitis A – acute viral	32	16	16	4	68
Hepatitis B – acute viral	5	4	2	2	1.
Hepatitis B – chronic/carrier	49	29	31	8	11
Hepatitis B – unspecified	369	258	197	20	844
Hepatitis C – acute viral	7	6	6	_	19
Hepatitis C – unspecified	695	464	382	121	1,66
Hepatitis D – unspecified	3	_	_	1	
Hepatitis, acute viral (NOS)	-	1		_	
HIV	32	32	27	29	120
Hydatid disease	5	1	_	_	
Legionnaires' disease	6	7	1	1	1
Leptospirosis	_	1	_	_	
Malaria	2	3	2	1	
Measles	43	28	49	19	139
Meningococcal infection (NOS)	_	1	1	_	
Meningococcal meningitis	12	10	6	3	3
Meningococcal septicaemia	3	2	5	1	1
Mumps	2	2	1	-	
Mycobacterial atypical	26	13	2	1	4.
Mycobacterial infection (NOS)	13	9	3	-	25
Mycobacterial tuberculosis	23	18	14	4	59
Pertussis	120	110	105	53	388
Q fever	18	18	30	5	7
Rubella	36	58	79	41	214
Salmonella (NOS)	49	68	54	15	186
Syphilis infection	61	71	43	15	190
Typhoid and paratyphoid	_	1	_	_	

TABLE 6

SUMMARY OF NSW INFECTIOUS DISEASE NOTIFICATIONS SEPTEMBER 1995

Condition	Num Peri	ber of c	ases not	
	Sept 1994	Sept 1995	Sept 1994	Sept 1995
Adverse reaction	3	1	32	23
AIDS	56	4	419	203
Arboviral infection	5	5	360	489
Brucellosis	2	_	4	1
Cholera	-	_	_	1
Diphtheria	-	-	-	-
Foodborne illness (NOS)	8	3	147	299
Gastroenteritis (instit.)	54	113	254	699
Gonorrhoea	23	5	275	260
H influenzae epiglottitis	2	1	20	5
H influenzae B – meningitis	1	. 1	13	8
H influenzae B – septicaemia	1	-	11	6
H influenzae infection (NOS)	-	-	8	2
Hepatitis A	37	4	412	344
Hepatitis B	389	30	3,365	3,133
Hepatitis C	812	121	6,935	5,460
Hepatitis D	1	1	15	13
Hepatitis, acute viral (NOS)	_	-	2	1
HIV infection	36	29	337	350
Hydatid disease	-	-	12	10
Legionnaires' disease	3	1	53	58
eprosy		_	3	1
eptospirosis	-	_	13	4
isteriosis	1	-	6	7
Malaria	11	1	156	83
Measles	217	19	604	458
Meningococcal meningitis	4	3	58	49
Meningococcal septicaemia	5	1	30	19
Meningococcal infection (NOS)	3	_	13	12
Mumps	2	_	6	8
Mycobacterial tuberculosis	38	4	322	227
Mycobacterial – atypical	50	1	398	250
Mycobacterial infection (NOS)	5		31	62
Pertussis	133	53	1,116	830
Plaque		_		_
Poliomyelitis	_1	_	_	
Q fever	16	5	198	153
Rubella	21	41	150	400
Salmonella infection (NOS)	58	15	820	862
Syphilis	94	15	829	591
Tetanus		,,,	2	331
Typhoid and paratyphoid	3		28	29
Typhus	2		-20	23
Viral haemorrhagic fevers				
Yellow fever				
I EIIOW IEVEI				

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 Public Health Unit, ND Northern District Public Health Unit, WN Western New South Wales Public Health Unit, CW Central West Public Health Unit, SW South West Public Health Unit, SE South East Public Health Unit, 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.

TABLE 7																		
INFECTIOUS DISEASE CUMULA RECEIVED BY SEPTEMBER 30,		OTIFICA	TIONS	FOR N	SW, 19	995												
Condition	CCA	CSA	CW	ESA I	HUN	ILL	NC	ND	NSA	SE	SSA	SW	SWS	WEN	WN	WSA	U/K	Tota
AIDS	2	42	1	70	7	1	24	_	24	-	10	_	6	6	_	10	_	203
Arboviral infection	6	4	_	7	12	24	191	46	5	155	3	12	- 1	2	18	3	_	489
Brucellosis	1	-	_	-	-	-	-	-	-	-	_	-	_	_	-	-	_	
Cholera	-	-	-	- 1	-	-	-	-	_	-	-	-	-	-	-	-	-	
Gonorrhoea infection	2	41	6	106	6	9	14	6	13	7	14	-	14	3	10	9	-	26
Hepatitis B – acute viral	-	3	1	11	-	-	3	2	-	1	_1	-	3	=	10	5	_	4
Hepatitis B – chronic/carrier	15	-	13	187	-		7	10	_ 3		_11			9	8	83	_	34
Hepatitis B – unspecified	18	269	9	51	62	60	46	8	378	22	384	16	1,013	19	6	386	_	2,74
Hepatitis C – acute viral	1	-	1	5	-	-				1				2	40	1	_	- 5
Hepatitis C – unspecified	138	495	247	818	341	303	610	152	387	187	334	162	625	104	22	483	_	5,40
Hepatitis D – unspecified	-	-	_	1	-	-	4	- 1		_	- 1	1	3	_	_	- 1		1
Hepatitis, acute viral (NOS)	-	-	-	_ 1		=			_	_		_	-	-			_	35
HIV infection	8	55	2	123	13	8	6	2	20	-	15	5	22	6	- 1	14	6	33
Hydatid disease	-	=	- 1	1		- T	1.		1	_	_	2	3	2	-	17	- T	
Legionnaires' disease	1	2	_	6	10	5	- 1	2	8		_	_	- 3			17		
Leprosy	_	1	-	-	-	-				_	_	_	_	_	_		-	
Leptospirosis	_	_	-	_	1	_	,	2	-	-	3	-	- 4	3	_	10		8
Malaria	3	5	_	8	9	4	8	- 1	20	2	3	3	4	- 5		- 10	-	1
Meningococcal infection (NOS)	1 1			2	8	3	4	2	-		3	U	4	-		2		2
Meningococcal meningitis	5	1	4	- 3	5	3	- 4	- 4	2	3	4	7	2	2		_		
Meningococcal septicaemia	-	3		-		-		ļ	27		10	3	30	10	6	16		24
Mycobacterial atypical	3	28 5	1	64	14	6	12	6	9	- 1	18	3	21	2	0	7		- 6
Mycobacterial infection (NOS)	3	21	1	13		4	3	2	28	-	25	3	54	3	4	57		22
Mycobacterial tuberculosis	3	21	9	13	5	2	38	28		17		2	34	-	45	3/		15
Q fever					9	- 2	38	28	_	17	-	_			43			
Salmonella infection Syphilis infection	5	54	10	111	14	10	53	33	26	6	36	3	88	13	91	38		59

										4.00							
VACCINE PREVENTABLE AND						IOTIFICA	ATIONS	FOR N	SW, 19	95							
BY PUBLIC HEALTH UNIT, REC	CEIVED B	Y SEPTI	EMBER :	30, 1995	5												
	Lees						NG	NID	NICA	CE	CCA	CVA	CINC	MEN	18/81 1	N/C A	Ŧ
Condition	CCA	CSA	CW	ESA	HUN	ILL	NC	ND	NSA	SE	SSA	SW	sws	WEN	WN \	NSA	10
Adverse event after																	
immunisation	-	_	_	1	- 1	-	4	1	-	4	2	4	-	4	-	2	
H. influenzae epiglottitis	-	_	1	1	-	-	1	-	-	-	1	-	-	-	1	-	
H. influenzae infection (NOS)	1		_	-		_	1	_	-	-	-	_	-	-	-	_	
H. influenzae meningitis	-	1	_	-	-	-	3	_	-	_	_	-	1	_	-	3	
H. influenzae septicaemia	-	_	_	_	1	-	1	_	1	- 5	1	-	1	-		- 1	
Measles .	13	23	11	53	50	53	39	44	12	5	32	9	29	37	6	42	
Mumps		_	_	- 1	-	2	2	_	- 1	_	-	-	-	-	-	2	
Pertussis	22	18	18	23	40	54	243	13	67	23	37	52	53	79	11	77	
Rubella	A SECONDARY	EXCEPTION OF THE	8	23	66	2	117	25	51	5	16	3	16	16	8	35	

	MARKET TO																
FOODBORNE INFECTIOUS DIS BY PUBLIC HEALTH UNIT, REC			shalpikan/hitikiya	Free Constitution		R 1995											
Condition	CCA	CSA	CW	ESA	HUN	ILL	NC	ND	NSA	SE	SSA	SW	SWS	WEN	WN	WSA	Tota
Foodborne illness (NOS)	16	9	3	_	162	_	3	1	4	_	1	8	49	_	23	20	
Gastroenteritis (instit.)	-	9 33 51	_	_	96	-	47 20	-	109	1		-	-	185	2		69
Hepatitis A – acute viral	8	51	33	89	17	7	20	_	32	_	24	10	26	3	3	21	34
Listeriosis	_	1	1	1	_	-	-	1	1	- 1	_	_	-	-	-	1	
Salmonella (NOS)	18	41	17	62	61	39	99	57	91	36	78	23	67	46	34	93	
Typhoid and paratyphoid	-	1		8	_	_	3	_	3	_	5	-	4	- 1	_	4	

ERRATUM

August edition of the NSW Public Health Bulletin. 'Suicide Mortality in NSW: Clients of Mental Health Services.'

An error in printing caused a footnote ** Crude rates' to be omitted from the bottom of table 1, on page 78. The table is reproduced in full below.

TABLE 1						
SUICIDE RATES	AND S	MRs BY	PSYCHI	ATRIC	DIAGN	OSIS

			narge risks				Chroni	c risks		
	Hospital contact group Rate/ SMR			ord³ ollow-up SMR		nunity t group SMR	Oxford 329 follow Rate/		Misso 3-year fol Rate/	
		(99%CI)	1,000 py*	(95%CI)	1,000 py		1,000 py*		1,000 py	Jivii
Males							. a X			
Schizophrenia	27.4	132 (60-204)	9	46 (1-258)	1.8	9 (5-12)	6	30 (11-66)	2.1	7
Depression										
– Other depression	121	581 (271-891)	116	519 (260-929)	12.1	58 (33-83)	12	55 (28-990)	1.9	6
– Major depression	n.a.	n.a. <i>n.a.</i>	60	268 (98-585)	n.a.	n.a. <i>n.a.</i>	9	42 (18-83)	4	14
Other	9.5	46 (15-76)	n.a.	n.a. <i>n.a.</i>	1.1	6 <i>(3-8)</i>	n.a.	n.a. <i>n.a</i> .	n.a.	n.a.
Females										
Schizophrenia	10.4	173 (0-372)	10	92 (2-515)	0.7	12 (4-21)	3	30 (6-88)	0.9	10
Depression										
– Other depression	16.5	282 (0-605)	19	147 (40-375)	1.7	28 (5-50)	5	43 (21-79)	0.7	8
– Major depression	n.a.	n.a. <i>n.a</i> .	14	96 (19-282)	n.a.	n.a. <i>n.a</i> .	6	40 (19-74)	1.8	18
Other	6.8	113 <i>(4-222)</i>	n.a.	n.a. <i>n.a</i> .	0.3	5 (1-9)	n.a.	n.a. <i>n.a.</i>	n.a.	n.a.
All										
Schizophrenia	21	158 (80-236)	n.a.	n.a. <i>n.a</i> .	1.4	10 (7-14)	n.a.	n.a. <i>n.a.</i>	n.a.	n.a.
Depression	59.4	447 (231-663)	n.a.	n.a.	4.1	31 (18-44)	n.a.	n.a. <i>n.a.</i>	n.a.	n.a.
Other	8.4	63 (28-97)	n.a.	n.a.	0.6	5 (3-7)	n.a.	n.a.	n.a.	n.a.

^{*} Crude rates