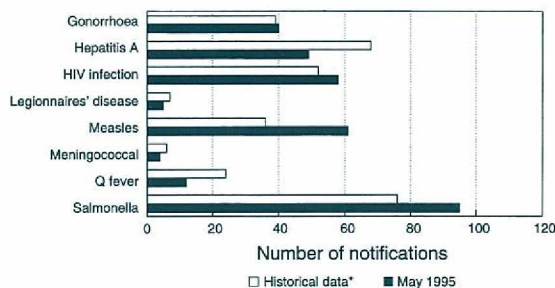


INFECTIOUS DISEASES

FIGURE 11
**SELECTED INFECTIOUS DISEASES:
MAY 1995 COMPARED WITH HISTORICAL DATA**


* Historical data: the average number of notifications diagnosed in the same month in the previous three years

TABLE 7
**SUMMARY OF NSW INFECTIOUS DISEASE NOTIFICATIONS
JUNE 1995**

Condition	Number of cases notified			
	Period		Cumulative	
	June 1994	June 1995	June 1994	June 1995
Adverse reaction	2	—	21	12
AIDS	38	17	273	140
Arboviral infection	34	11	341	431
Brucellosis	—	—	—	—
Cholera	—	—	—	—
Diphtheria	—	—	—	—
Foodborne illness (NOS)	14	5	130	271
Gastroenteritis (instit.)	25	10	112	96
Gonorrhoea	26	15	185	194
H influenzae epiglottitis	4	—	18	3
H influenzae B – meningitis	4	2	10	5
H influenzae B – septicaemia	2	—	8	4
H influenzae infection (NOS)	1	—	8	2
Hepatitis A	48	13	290	286
Hepatitis B	347	87	2,183	2,155
Hepatitis C	832	248	4,427	3,806
Hepatitis D	2	—	13	8
Hepatitis, acute viral (NOS)	—	—	1	1
HIV infection	32	25	248	286
Hydatid disease	3	1	8	5
Legionnaires' disease	8	2	36	43
Leprosy	1	—	2	—
Leptospirosis	1	—	11	12
Listeriosis	—	—	4	6
Malaria	20	—	115	74
Measles	17	21	310	338
Meningococcal meningitis	7	9	29	25
Meningococcal septicaemia	3	3	13	11
Meningococcal infection (NOS)	2	—	6	10
Mumps	1	2	3	5
Mycobacterial tuberculosis	37	4	222	116
Mycobacterial – atypical	36	—	271	163
Mycobacterial infection (NOS)	3	—	18	48
Pertussis	73	44	754	455
Plague	—	—	—	—
Poliomyelitis	—	—	—	—
Q fever	20	5	153	79
Rubella	5	1	57	50
Salmonella infection (NOS)	66	24	646	689
Syphilis	83	20	551	399
Tetanus	—	—	—	—
Typhoid and paratyphoid	3	—	16	23
Typhus	—	—	—	—
Viral haemorrhagic fevers	—	—	—	—
Yellow fever	—	—	—	—

SLIGHT INCREASE IN HIV NOTIFICATIONS

The total number of notifications of HIV infection has decreased almost every year from 1987, when 2,083 cases were notified, to 1994, when 461 were notified. However the notification rate is slightly higher this year when compared with both the same period last year (Table 7) and historical data (Figure 11). It appears the final figure for 1995 will be slightly higher than that for 1994. HIV notifications are reported by the date of diagnosis rather than the date of infection, because this is usually not known. Further data on new HIV notifications, with evidence of recent infection, are available in the *Bulletin* supplement '1993 Infectious Disease Notifications' published in March 1995.

MEASLES IN A HIGH SCHOOL

Between May 29 and June 21 a cluster of 14 cases of measles was identified in students of a high school in the Central Sydney Area. All cases occurred in females aged 13 to 15 years and three cases were confirmed by serology. The cases resided in the Central, Southern, Western and South Western Areas of Sydney. Subsequently letters were sent to parents on two occasions, urging them to check their children's immunisation records and if necessary to have them immunised. This cluster highlights the importance of the adolescent measles/mumps/rubella (MMR) immunisation program which was implemented in NSW in 1994. This program replaced the schoolgirl rubella immunisation program. Both boys and girls are now immunised with MMR in Year 6 or 7. This should eliminate the circulation of measles, mumps and rubella virus in high schools in the near future as the cohort of immunised children passes through the school grades.

Measles notifications are high compared with the same period last year (Table 7) and historical data (Figure 11). March-July is typically a period of low measles activity. The notification rate usually peaks between September and November.

HEPATITIS A IN A CHILD CARE CENTRE

Central Sydney Public Health Unit reported seven cases of hepatitis A in a child care centre from mid-May and through June. A member of staff was the first case notified, followed by six children. Immunoglobulin was recommended for all those attending the centre as soon as the first case was notified. That an adult was the first case notified is not unexpected as hepatitis A is usually asymptomatic in young children. This can make outbreaks associated with child care centres very difficult to detect and control.

The hepatitis A notification rate has been similar this year to that for the same period last year (Table 7). Central Sydney Area had a notification rate higher than the State average so far this year with 13.7/100,000 population (the NSW average was 4.7/100,000). An outbreak in Eastern and Central Sydney originally involving injecting drug use as a risk exposure was reported in the January 1995 *Bulletin*.

Q FEVER: GREATER IMMUNISATION COVERAGE NEEDED

Q fever is a disease caused by the rickettsial microorganism *Coxiella burnetii*. The disease can be variable in its mode of onset and the severity of the illness experienced (from a mild febrile illness to a chronic debilitating condition that can last from months to years). It is usually transmitted

Continued on page 73 ►

TABLE 8

INFECTIOUS DISEASE NOTIFICATIONS FOR 1995
BY PUBLIC HEALTH UNIT FOR NOTIFICATIONS RECEIVED BY JUNE 30, 1995

Condition	CCA	CSA	CW	ESA	HUN	ILL	NC	ND	NSA	SE	SSA	SW	SWS	WEN	WN	WSA	U/K	Total
AIDS	2	32	-	49	5	1	11	-	15	-	10	-	5	5	-	5	-	140
Arboviral infection	5	3	-	6	10	24	163	38	3	146	3	11	-	2	17	-	-	431
Gonorrhoea infection	2	31	6	77	2	9	10	6	6	4	13	-	10	2	8	8	-	194
Hepatitis B - acute viral	-	3	-	6	-	-	1	2	-	1	1	-	2	1	7	3	-	27
Hepatitis B - chronic/carrier	11	-	7	131	-	-	4	9	1	-	4	-	-	4	7	52	-	230
Hepatitis B - unspecified	12	215	6	37	49	47	26	3	234	15	298	10	662	9	5	270	-	1,898
Hepatitis C - acute viral	-	-	-	3	-	-	-	-	-	1	-	-	-	2	24	1	-	31
Hepatitis C - unspecified	102	394	166	649	244	211	379	66	256	118	255	118	397	69	13	334	-	3,771
Hepatitis D - unspecified	-	-	-	1	-	-	3	-	-	-	1	-	3	-	-	-	-	8
Hepatitis, acute viral (NOS)	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
HIV infection	4	41	1	102	9	6	7	-	13	-	12	-	18	8	1	14	50	286
Hydatid disease	-	-	1	1	-	-	1	-	1	-	-	-	1	-	-	-	-	5
Legionnaires' disease	-	1	-	2	9	5	1	1	5	-	-	-	2	1	-	16	-	43
Leprosy	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Leptospirosis	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	2
Malaria	2	5	-	7	7	4	8	1	19	-	3	2	4	3	-	9	-	74
Meningococcal infection (NOS)	1	-	-	1	1	-	2	-	-	-	2	1	1	-	1	-	-	10
Meningococcal meningitis	2	1	2	2	5	3	3	1	2	1	2	-	1	-	-	-	-	25
Meningococcal septicaemia	-	2	-	-	5	-	1	-	1	-	1	-	1	-	-	-	-	11
Mycobacterial atypical	4	24	-	40	12	6	7	3	19	1	17	3	18	1	6	1	-	162
Mycobacterial infection (NOS)	4	2	-	1	3	-	3	-	4	-	-	-	29	-	-	2	-	48
Mycobacterial tuberculosis	-	12	1	9	4	4	2	2	15	1	19	1	6	2	3	35	-	116
Q fever	-	1	4	-	6	2	13	23	-	-	-	1	1	-	27	1	-	79
Syphilis infection	4	43	7	77	9	9	28	22	16	4	32	2	50	7	65	24	-	399
Tuberculosis - non active	-	-	-	-	-	5	1	-	10	-	24	1	-	-	1	1	-	43

TABLE 9

VACCINE PREVENTABLE AND RELATED CONDITIONS, NOTIFICATIONS FOR 1995
BY PUBLIC HEALTH UNIT, RECEIVED BY JUNE 30, 1995

Condition	CCA	CSA	CW	ESA	HUN	ILL	NC	ND	NSA	SE	SSA	SW	SWS	WEN	WN	WSA	Total
Adverse event after immunisation	-	-	-	-	-	-	-	2	-	1	2	5	-	2	-	-	12
H. influenzae epiglottitis	-	-	-	1	-	-	1	-	-	-	1	-	-	-	-	-	3
H. influenzae infection (NOS)	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2
H. influenzae meningitis	-	1	-	-	-	-	3	-	-	-	-	-	-	-	-	-	5
H. influenzae septicaemia	-	-	-	-	1	-	-	-	1	-	1	-	-	-	-	-	4
Measles	8	22	2	46	32	51	18	27	10	5	27	8	20	32	-	30	338
Mumps	-	-	-	1	-	2	1	-	-	-	-	-	-	-	-	-	5
Pertussis	14	13	5	17	26	36	117	6	39	11	24	25	20	42	11	49	455
Rubella	-	-	-	4	-	2	8	1	1	-	12	1	-	4	1	16	50

TABLE 10

FOODBORNE INFECTIOUS DISEASE NOTIFICATIONS FOR 1995
BY PUBLIC HEALTH UNIT, RECEIVED BY JUNE 30, 1995

Condition	CCA	CSA	CW	ESA	HUN	ILL	NC	ND	NSA	SE	SSA	SW	SWS	WEN	WN	WSA	Total
Foodborne illness (NOS)	16	9	-	-	162	-	-	1	-	-	-	8	37	-	19	19	271
Gastroenteritis (inst.)	-	11	-	-	2	-	45	-	33	-	-	-	-	-	2	3	96
Hepatitis A - acute viral	8	45	30	77	10	7	14	-	22	-	20	10	22	3	3	15	286
Listeriosis	-	1	1	1	-	-	-	-	1	1	-	-	-	-	-	-	6
Salmonella (NOS)	15	38	13	46	56	39	87	45	65	27	62	20	55	32	27	62	688
Typhoid and paratyphoid	-	1	-	7	-	-	1	-	2	-	5	-	3	1	-	3	23
Vibrio infection (non cholera)	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1

Infectious diseases

► *Continued from page 71*

by the airborne dissemination of rickettsia in dust from premises contaminated by placental tissues, birth fluids and/or excreta from infected animals. This usually occurs in establishments processing infected animals or animal products.

Q fever is a preventable condition and a vaccine has been readily available in NSW since 1993. The vaccine is highly effective in preventing the disease if a susceptible individual is immunised before exposure to *Coxiella burnetii*.

The level of notifications received for this condition has decreased over the period 1993-1995, from 6.6/100,000 population in 1993 to 2.6/100,000 (projected for 1995) (see Figure 12). Unfortunately, for almost half these notifications, the occupation of the individual was not adequately coded. Of the cases whose occupations were recorded, 60 per cent were directly identified with the meat industry and a further 28 per cent were associated in some way with industries dealing with livestock (Figure 13). Young males entering employment in the meat industry continue to be disproportionately affected (Figure 14). Most notifications come from the country areas of NSW and in particular from the Northern Districts and Western NSW (Table 8).

The Meat Industry and the WorkCover Authority of NSW, through the administration of the Occupational Health and Safety Act 1988, are best placed to ensure the health of workers in the meat and livestock industry is protected through better implementation of the program to immunise against Q fever. The role of the NSW Health Department is to maintain an effective surveillance program. In addition, some Public Health Units (PHUs) have produced information sheets on this disease.

MENINGOCOCCAL MENINGITIS

There was an increase in sporadic cases of meningococcal meningitis notified in June (Table 11). No case was related to any other.

INFLUENZA SURVEILLANCE

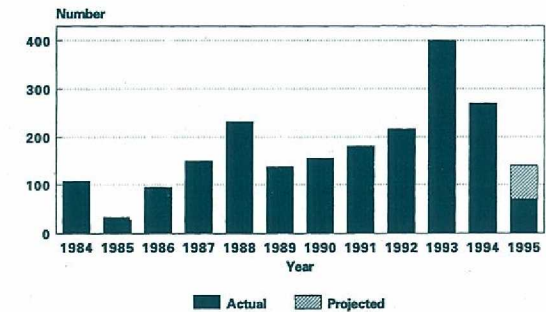
Data describing influenza-like illness (ILI) activity during the winter season of 1995 indicate local outbreaks in southern and western NSW. As isolates of influenza virus are declining the agent most likely to be responsible for ILI in following weeks is RSV.

Surveillance data for influenza provided by sentinel general practices representing about 73 doctors and 9,500 consultations a week were reported by nine PHUs to the end of June. The consultation rates for ILI reached a peak in the second week of June (4.1 per cent) and then gradually decreased. South East PHU (covering the districts of the South Coast, Monaro and the Southern Tablelands) has reported rates above the epidemic level since the second week of May. Here the peak in consultation rates was reached in the third week of June (19.2 per cent).

School absenteeism has increased since early May. The average rate for May, reported by five PHUs representing 13 schools and 9,200 pupils, was 5.9 per cent. The average rate for June, reported by nine schools covering 5,800 pupils (but included only up to the third week of June) was 10.5 per

FIGURE 12

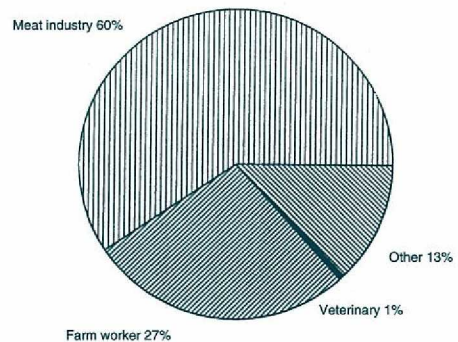
Q FEVER NOTIFICATIONS, NSW 1984-1995



Source: NSW Department of Health

FIGURE 13

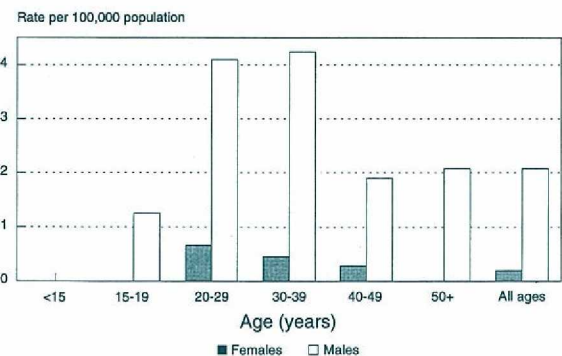
Q FEVER NOTIFICATIONS 1993-1995, NSW BY OCCUPATION



Source: Infectious Diseases Surveillance System

FIGURE 14

Q FEVER NOTIFICATIONS BY AGE NSW 1995



Data current to July 3, 1995
Source: Infectious Diseases Surveillance System

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Infectious diseases

► Continued from page 73

cent. Once again South East PHU reported the highest rates since May. Due to school holidays no report for school absenteeism has been received since the end of June.

The Prince of Wales and Westmead laboratories have reported 13 isolates of influenza A and seven of influenza B by serology for the first week of July. Cross-reaction was found for four patients, that is, samples from four patients were positive for both influenza A and B. During the same period the laboratories of the Institute of Clinical Pathology and Clinical Research at Westmead Hospital, the Virology Department of the Royal Alexandra Hospital for Children and Liverpool reported one influenza A, two influenza B, 62 RSV, three parainfluenza 3 and one rhinovirus isolate between them. The number of influenza virus and RSV isolates detected was higher than for the same period last year but lower than the number detected each week during June. All the NSW influenza isolates for the previous weeks were subtype A(H1N1) with a minor antigenic drift from the A/Texas/36/91 strain and B/Beijing/184/93-like strain. The A(H1N1) viruses reacted well with A/Texas/36/91 sera contained in 1995 vaccine.

1. National Influenza Surveillance 1995, *CDI* 1995; 19(13):321.

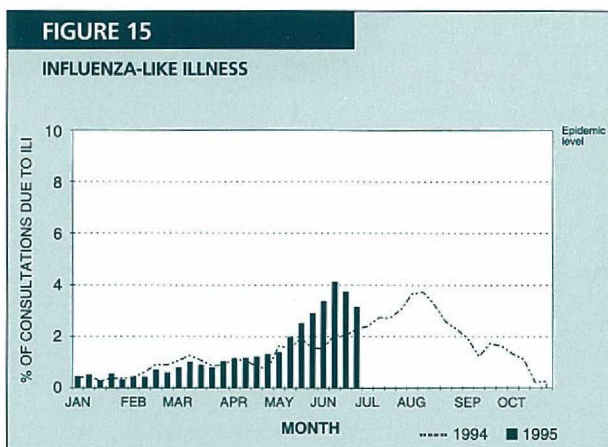


TABLE 11

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

Condition	Mar	Apr	May	Jun	Total
Adverse event after immunisation	2	2	4	-	8
AIDS	24	19	23	17	83
Arboviral infection	178	116	76	11	381
Foodborne illness (NOS)	26	25	7	5	63
Gastroenteritis (instit.)	10	34	37	10	91
Gonorrhoea infection	40	29	40	15	124
H influenzae epiglottitis	1	2	-	-	3
H influenzae infection (NOS)	-	1	-	-	1
H influenzae meningitis	1	-	-	2	3
H influenzae septicaemia	2	-	1	-	3
Hepatitis A - acute viral	51	32	49	13	145
Hepatitis B - acute viral	10	8	4	1	23
Hepatitis B - chronic/carrier	44	35	52	11	142
Hepatitis B - unspecified	407	324	348	75	1,154
Hepatitis C - acute viral	7	3	12	-	22
Hepatitis C - unspecified	801	528	686	248	2,263
Hepatitis D - unspecified	-	2	-	-	2
Hepatitis, acute viral (NOS)	-	-	1	-	1
HIV infection	51	39	58	25	173
Hydatid disease	4	-	-	1	5
Legionnaires' disease	11	2	5	2	20
Leptospirosis	-	1	-	-	1
Listeriosis	2	-	-	-	2
Malaria	10	10	17	-	37
Measles	66	34	61	21	182
Meningococcal infection (NOS)	2	3	1	-	6
Meningococcal meningitis	4	2	2	9	17
Meningococcal septicaemia	1	-	1	3	5
Mumps	-	-	1	2	3
Mycobacterial atypical	53	21	7	-	81
Mycobacterial infection (NOS)	10	11	12	-	33
Mycobacterial tuberculosis	27	12	16	4	59
Pertussis	71	62	127	44	304
Q fever	11	11	12	5	39
Rubella	7	5	15	1	28
Salmonella (NOS)	120	98	95	24	337
Syphilis infection	83	62	81	20	246
Typhoid and paratyphoid	2	5	-	-	7

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.