

INFECTIOUS DISEASES

NOTIFICATIONS

HAEMOPHILUS INFLUENZAE TYPE B (HIB)

Only 21 notifications for Hib disease were received for the first four months of 1994, for a rate of 1.02/100,000 population. This compares with a notification rate of 2.81/100,000 population for the same period in 1993.

Immunisation surveillance in the Northern Districts of NSW reveals coverage levels of 70 per cent. The Commonwealth Department of Human Services and Health is expected to continue to support the Hib "catch-up" program beyond June 1994.

PERTUSSIS (WHOOPING COUGH)

Notifications for pertussis peaked in epiweek 7. Two-thirds of notifications for 1994 were for the period before epiweek 8.

The notification rate for pertussis for the first four months of 1994 was 20.1/100,000 population. This compares with a rate of 7.9 for the same period in 1993.

Nineteen per cent of notifications were for children less than five years of age, and a further 40 per cent were for school-aged children. The mean age for notifications was 22.0 years (range one month to 86 years).

North Coast Public Health Unit (PHU) received 146 notifications at a rate of 104.1/100,000 population.

MEASLES

Notifications for measles peaked in epiweek 1. The notification rate for the first four months of 1994 was 11.7/100,000 population. This compares with a rate of 10.5 for the same period in 1993.

The North Coast Public Health Unit received 67 notifications at a rate of 47.8/100,000 population.

The mean age for notifications was 8.0 years (range four months to 41 years). Fifteen per cent of notifications were for neonates and infants (\leq one year of age). Fifty-nine per cent were for children over the age of five years, and 25 per cent were for people 12 years and older.

From October 1, 1994 it is anticipated that the schoolgirl rubella program will be replaced by a universal schoolchild measles-mumps-rubella program (not September 1 as reported in the April 1994 *NSW Public Health Bulletin*).

LEGIONNAIRES' DISEASE

Only one confirmed notification for Legionnaires' disease was received for April 1994. In previous years April has recorded the highest number of notifications for this condition. In anticipation of April being a higher risk month, the NSW Health Department issued a warning to building owners to ensure that maintenance standards of water-cooled air-conditioning systems were optimal.

Since 1992, 149 isolates of *Legionella* have been recorded on the Infectious Diseases Surveillance System; 80 per cent have been for *L pneumophila*, 17 per cent for *L longbeachae* and 3 per cent for *L micdadei*.

INFLUENZA SURVEILLANCE

NSW general practitioner sentinel influenza surveillance shows low levels of influenza activity in April (1.2 per cent of consultations), comparable to levels at the same time in 1993. During April reports were received from almost 100 doctors in both rural and metropolitan NSW through eight

FIGURE 8

HIB, NSW, \leq FIVE YEARS OF AGE
MARCH 1993-MAY 1994

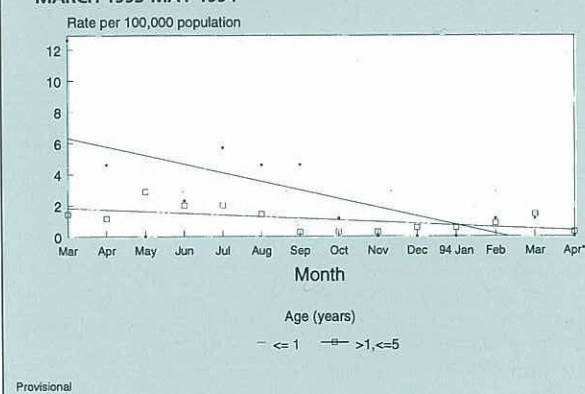
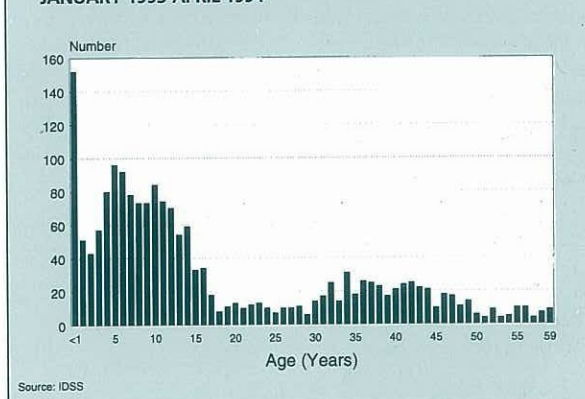


FIGURE 9

PERTUSSIS NOTIFICATIONS, NSW BY AGE,
JANUARY 1993-APRIL 1994



Source: IDSS

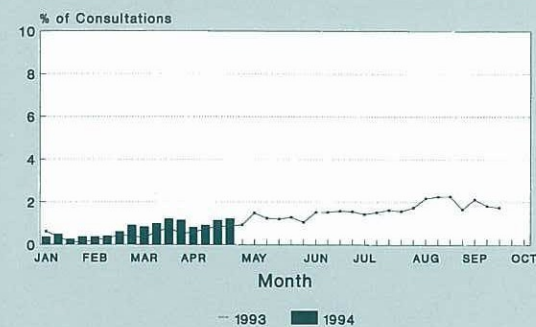
PHUs. The highest level of influenza-like illness recorded so far this year by a PHU is 2.4 per cent of consultations by Western Sector. Data on school absentee rates have been received from 10 schools through four PHUs. No significant increase in absentee rates has been detected. To the end of April, laboratory surveillance had detected no isolations of influenza virus and a small number of positive serological tests, including both influenza A and B.

RESPIRATORY VIRUS SCREEN

Each year it is important to identify which strains of influenza are circulating in the community and the extent of protection provided against them by the vaccine. Westmead ICPMR Virology Department has an important role as the NSW reference laboratory for influenza identification. Doctors are asked to submit samples to Westmead ICPMR from patients suspected of having influenza, particularly those ill early in the influenza season or index cases in outbreaks.

Collection requirements for viral culture

A throat swab specimen should be collected at the acute stage of the disease and sent with a minimum of delay. Specimen should be stored in a refrigerator and transported

FIGURE 10**"INFLUENZA-LIKE ILLNESS" NSW**

(Source: NSW Sentinel GP Network)

to the laboratory on ice (but not frozen). When long-term storage is necessary, store at -70°C with dry ice and transport to the laboratory in that condition.

A cotton-tipped wooden or plastic swab can be used and transferred to viral transport medium (commercial medium is available). A dry swab should never be sent to the laboratory and Stuart's or other bacteriological medium is unsuitable.

All specimens must be submitted in leak-proof containers and all specimen containers should be enclosed in sealed plastic bags with the request form in the open section of the bag.

It is essential that all available information is on the request form, including date of onset of symptoms and other relevant clinical details.

Further information can be obtained by phoning Westmead ICPMR Virology Department on (02) 633 6230.

INFLUENZA CRITERIA (RACGP)

- (A) Viral culture or serological evidence of influenza
- or
- (B) Influenza epidemic, plus four of the criteria in (C)
- or
- (C) Six of the following:
 1. sudden onset (within 12 hours)
 2. cough
 3. rigors and chills
 4. fever
 5. prostration and weakness
 6. myalgia, widespread aches and pains
 7. no significant respiratory physical signs other than redness of nasal mucous membrane and throat
 8. influenza in close contact

MEASLES IN ADULTS IN A HOME FOR THE INTELLECTUALLY DISABLED

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The advent of vaccination has changed the epidemiology of measles. While most cases still occur in children in NSW, an increasing proportion of cases is occurring in adults. In 1993, 28 per cent of cases notified to the NSW Health Department were over 12 years¹.

This report describes two cases of measles reported in adults from a residential home for the intellectually disabled, and the actions taken by the Northern Sydney Area PHU to prevent further cases.

The index case, a female aged 36 years, developed measles, confirmed by serology, in January 1994, following a holiday visit with relatives. She had entered the residential home 18 months before, having spent most of her life in seclusion with her elderly mother. The second case, a female with Downs syndrome also aged 36 years, shared a room with the index case. She developed a measles rash 11 days after the onset of the rash in the index case; her diagnosis was also confirmed by serology. Neither case had any record of measles or measles vaccination.

There were 71 residents in the home, ranging in age from 18 to 71 years, who had been in contact with the two cases. Because of the possibility of spread to other susceptible people, the PHU (after discussion with the management of the home) decided to provide measles-mumps-rubella immunisation to residents under the age of 40 who did not have a history of measles or measles immunisation. Twenty-five residents were identified as under 40 years, of whom 13 fulfilled the criteria above, and all were vaccinated by the local doctor. No further cases of measles, or of reaction to the vaccination, were found on follow-up 18 days later.

This report illustrates the risk of adults developing measles in group residential settings and the measures that need to be considered in controlling an outbreak. Measles in adults over the age of 35 years is uncommon but it is possible that there were more susceptible people among our group of adults because of past seclusion and consequent lack of exposure to wild measles. The report also confirms that it is safe and sometimes appropriate to vaccinate susceptible adult contacts of measles, as recommended by the National Health and Medical Research Council² and the NSW Health Department³.

Australian recommendations do not provide any guidelines about the upper age limit for vaccination of adult contacts. In the United States, where measles vaccine became available in 1963, people born before 1957 are generally considered immune to measles through contracting natural measles infection⁴. Measles vaccine was introduced in Australia in 1968, although coverage levels remained low for the first 10 years⁵. It is unlikely that people born in this country before 1968 would have been vaccinated, but most are likely to be immune from natural measles infection. However, there may be a small proportion of people born in the decade or so preceding the introduction of vaccination who did not have contact with natural measles, and therefore remain susceptible. Vaccination for such individuals in group residential settings should be considered in the event of a measles outbreak.

1. NSW Health Department. Infectious Diseases. *NSW Public Health Bulletin* 1993; 4(12):140.
2. National Health and Medical Research Council. Measles. In: National Health and Medical Research Council Immunisation Procedures, 4th edition, Canberra: AGPS, 1991; 36-43.
3. NSW Health Department. Infectious Diseases Manual. Sydney: NSW Health Department, 1991.
4. Markowitz LE and Orenstein WA. Measles Vaccines. In: *Pediatric Vaccinations: Update 1990*. *Pediatric Clinics of North America* 1990; 37(3):603-623.
5. Christopher PJ, MacDonald PA, Murphy AM and Buckley PR. Measles in the 1980s. *Med J Aust* 1983; 2:488-491.

TABLE 3

INFECTIOUS DISEASE NOTIFICATIONS FOR 1994
FOR NOTIFICATIONS RECEIVED BY APRIL 30, 1994
BY MONTH OF ONSET

Condition	Jan	Feb	Mar	Apr	Total
AIDS	35	27	43	3	108
Arboviral infection	22	61	63	11	157
Foodborne illness (NOS)	16	5	4	34	59
Gastroenteritis (instit.)	1	11	9	-	21
Gonorrhoea	33	26	30	20	109
H influenzae epiglottitis	2	1	5	1	9
H influenzae meningitis	1	-	2	1	4
H influenzae septicaemia	1	1	1	-	3
H influenzae infection (NOS)	2	1	1	1	5
Hepatitis A - acute viral	49	46	43	10	148
Hepatitis B - acute viral	7	6	1	3	17
Hepatitis B - unspecified	306	289	336	82	1,013
Hepatitis C - acute viral	1	-	-	-	1
Hepatitis C - unspecified	557	695	601	176	2,029
Hepatitis D - unspecified	1	2	-	-	3
Hepatitis - acute viral (NOS)	1	1	-	-	2
HIV infection	24	39	39	13	115
Hydatid disease	-	1	1	-	2
Legionnaires' disease	3	4	4	1	12
Leptospirosis	1	2	2	-	5
Listeriosis	2	2	-	-	4
Malaria	5	9	7	-	21
Measles	147	64	28	5	244
Meningococcal meningitis	5	3	5	5	18
Meningococcal septicaemia	1	1	2	1	5
Meningococcal infection (NOS)	1	-	-	-	1
Mumps	1	-	-	-	1
Mycobacterial atypical	31	21	8	-	60
Mycobacterial tuberculosis	27	17	11	2	57
Mycobacterial infection (NOS)	7	13	10	4	34
Pertussis	169	127	98	22	416
Q fever	20	12	8	4	44
Rubella	8	6	4	-	18
Rubella - congenital	-	1	-	-	1
Salmonella (NOS)	59	69	77	34	239
Salmonella bovis moribificans	1	3	2	-	6
Salmonella typhimurium	47	51	46	8	152
Syphilis	84	83	95	25	287
Tetanus	-	-	-	1	1
Typhoid and paratyphoid	1	3	3	-	7
Total	1,683	1,707	1,589	471	5,450

TABLE 4

SUMMARY OF NSW INFECTIOUS DISEASE NOTIFICATIONS
APRIL 1994

Condition	Number of cases notified			
	Period		Cumulative	
	April 1993	April 1994	April 1993	April 1994
Adverse reaction	1	4	6	12
AIDS	29	3	143	108
Arboviral infection	64	11	533	157
Brucellosis	1	-	-	-
Cholera	-	-	-	-
Diphtheria	-	-	-	-
Foodborne illness (NOS)	17	34	49	59
Gastroenteritis (instit.)	-	-	39	21
Gonorrhoea	41	20	145	109
H influenzae epiglottitis	4	1	13	9
H influenzae B - meningitis	10	1	27	4
H influenzae B - septicaemia	3	-	11	3
H influenzae infection (NOS)	-	1	6	5
Hepatitis A	51	10	228	148
Hepatitis B	275	85	1,212	1,030
Hepatitis C	441	176	1,760	2,030
Hepatitis D	2	-	3	3
Hepatitis - acute viral (NOS)	1	-	2	2
HIV infection	46	13	202	115
Hydatid disease	-	-	-	2
Legionnaires' disease	14	1	33	12
Leprosy	-	-	-	-
Leptospirosis	1	18	8	5
Listeriosis	-	-	4	4
Malaria	9	-	67	21
Measles	29	5	213	244
Meningococcal meningitis	7	5	13	18
Meningococcal septicaemia	4	1	9	5
Meningococcal infection (NOS)	2	-	5	1
Mumps	-	-	-	1
Mycobacterial tuberculosis	31	2	136	57
Mycobacterial - atypical	32	-	142	60
Mycobacterial infection (NOS)	1	4	13	34
Pertussis	34	22	161	416
Plague	-	-	-	-
Poliomyelitis	-	-	-	-
Q fever	35	4	127	44
Rubella	29	-	149	19
Salmonella infection (NOS)	89	42	430	397
Syphilis	60	25	224	287
Tetanus	-	1	2	1
Typhoid and paratyphoid	4	-	18	7
Typhus	-	-	-	-
Viral haemorrhagic fevers	-	-	-	-
Yellow fever	-	-	-	-

TABLE 5

FOODBORNE INFECTIOUS DISEASE NOTIFICATIONS
FOR NOTIFICATIONS RECEIVED BY APRIL 30, 1994
BY PUBLIC HEALTH UNIT

Condition	CSA	SSA	ESA	SWS	WSA	WEN	NSA	CCA	ILL	HUN	NCR	NER	OFR	CWR	SWR	SER	U/K	Total
Foodborne illness (NOS)	1	10	7	10	13	7	3	4	1	-	-	-	2	-	-	1	-	59
Gastroenteritis (instit.)	12	1	-	3	3	-	-	1	-	1	-	-	-	-	-	-	-	21
Hepatitis A - acute viral	8	4	18	15	16	1	13	2	2	8	20	10	3	5	23	-	-	148
Listeriosis	-	-	1	-	-	-	-	-	1	1	-	-	1	-	-	-	-	4
Salmonella (NOS)	12	19	20	22	21	4	25	7	7	16	39	6	17	6	17	1	-	239
Salmonella bovis moribificans	-	1	1	1	1	-	1	-	-	1	-	-	-	-	-	-	-	6
Salmonella typhimurium	13	16	11	3	32	4	20	8	14	12	1	1	2	7	7	1	-	152
Typhoid and paratyphoid	3	1	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	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, NCR North Coast Health Region, NER New England Health Region, OFR Orana and Far West Health Region, 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.

TABLE 6

INFECTIOUS DISEASE NOTIFICATIONS FOR 1994
FOR NOTIFICATIONS RECEIVED BY MARCH 30, 1994
BY PUBLIC HEALTH UNIT

Condition	CSA	SSA	ESA	SWS	WSA	WEN	NSA	CCA	ILL	HUN	NCR	NER	OFR	CWR	SWR	SER	U/K	Total
Adverse event after immunisation	-	-	-	2	3	2	-	1	-	-	1	-	-	-	2	1	-	12
AIDS	18	5	35	2	17	12	9	2	4	1	3	-	-	-	-	-	-	108
Arboviral infection	-	2	-	-	-	-	5	1	2	11	116	2	10	-	7	1	-	157
Gonorrhoea	8	7	49	4	6	1	5	3	2	4	2	3	9	1	3	2	-	109
H. influenzae epiglottitis	1	2	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	9
H. influenzae meningitis	-	-	-	1	1	-	-	1	-	-	-	-	-	-	1	-	-	4
H. influenzae septicaemia	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	3
H. influenzae infection (NOS)	-	-	-	-	1	-	-	1	-	-	1	-	-	-	-	-	-	5
Hepatitis B - acute viral	3	1	5	-	1	-	-	-	-	1	1	-	2	1	-	2	-	17
Hepatitis B - unspecified	136	123	104	257	148	6	143	14	18	27	18	1	4	5	9	-	1,013	
Hepatitis C - acute viral	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hepatitis C - unspecified	229	117	379	208	150	41	208	66	92	123	263	11	11	42	52	37	2,029	
Hepatitis D - unspecified	-	-	-	-	-	-	1	-	-	-	2	-	-	-	-	-	-	3
Hepatitis, acute viral (NOS)	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2
HIV infection	20	6	50	5	2	1	3	1	-	2	2	-	-	-	-	-	23	115
Hydatid disease	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Legionnaires' disease	1	1	1	1	2	-	-	3	-	2	-	-	-	1	-	-	-	12
Leptospirosis	1	-	-	-	1	-	-	-	-	-	1	-	-	-	-	3	1	5
Malaria	4	-	4	2	1	-	4	-	-	1	1	-	-	-	-	-	-	21
Measles	23	5	8	14	18	20	18	3	6	19	68	9	21	9	-	3	-	244
Meningococcal meningitis	1	2	2	2	3	1	-	2	-	2	1	-	-	1	1	-	-	18
Meningococcal septicaemia	-	1	-	1	-	-	-	1	-	1	1	-	-	-	-	-	-	5
Meningococcal infection (NOS)	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Mumps	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Mumps	15	4	17	-	1	-	15	-	-	2	3	-	-	1	2	-	-	60
Mycobacterial atypical	5	12	5	8	13	2	1	1	3	4	2	-	-	-	-	1	-	57
Mycobacterial tuberculosis	9	-	4	-	3	1	11	-	-	2	3	-	-	-	-	-	-	34
Mycobacterial infection (NOS)	9	27	34	23	39	12	31	6	19	32	154	-	12	11	2	5	-	416
Pertussis	-	-	-	-	-	-	-	-	-	8	10	5	19	-	2	-	-	44
Q fever	-	-	-	-	-	-	-	-	-	-	3	2	-	-	2	-	-	18
Rubella	-	-	1	-	5	1	4	-	-	-	-	-	-	-	-	-	-	1
Rubella - congenital	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Syphilis	55	22	81	38	17	2	21	3	3	-	15	-	26	1	3	-	-	287
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1

TABLE 7

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

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

AHS Infection	CSA ¹	SSA ²	ESA ¹	SWS ²	WSA ³ + WEN	NSA ⁴	CCA ⁵	ILL ¹	HUN ³	NCR ¹	NER ⁴	OFR ³	CWR ⁶	SWR ⁷	SER ³
Chlamydia															
Male	-	-	10	1	-	-	-	2	-	-	3	-	-	-	-
Female	1	-	12	1	-	1	1	2	-	-	10	-	-	-	3
Total	1	-	22	2	-	1	1	4	-	-	13	-	-	-	3
Donovanosis															
Male	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Genital herpes															
Male	2	1	57	-	-	6	5	-	-	1	1	-	-	-	-
Female	-	3	16	-	-	3	2	-	-	1	6	-	-	-	-
Total	2	4	73	-	-	9	7	-	-	2	7	-	-	-	-
*Genital warts															
Male	7	6	161	19	-	11	16	11	-	6	3	-	-	-	1
Female	5	6	69	9	-	4	7	4	-	2	11	-	-	-	1
Total	12	12	230	28	-	15	23	15	-	8	14	-	-	-	2
Nongonococcal urethritis															
Male	2	1	127	12	-	4	11	5	-	6	5	-	-	-	1
Female	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2
Total	2	1	127	12	-	6	11	5	-	6	5	-	-	-	3
Lymphogranuloma venereum															
Male	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-