travel, need to ensure that they are protected against measles infection through immunisation. Free MMR vaccine is currently available to 18–30 year olds as part of a national immunisation campaign.

ACKNOWLEDGEMENTS

I am indebted to the Public Health Unit staff around NSW who provided data on measles notifications in NSW. Kind thanks to Mike Catton and the staff at the Victorian Infectious Diseases Reference Laboratory for providing genotyping of specimens from suspected measles cases in NSW.

REFERENCES

1. Centers for Disease Control and Prevention. Global measles control and regional elimination, 1998–1999. *Morb Mortal Wkly Rep* 1999; 48: 1124–1130.
2. NHMRC. *The Australian Immunisation Handbook*, 7th edition. Canberra: National Health and Medical Research Council, 2000.
3. NSW Department of Health. Infectious Diseases, NSW: November 1999. *NSW Public Health Bulletin* 1999; 10: 154.
4. MacIntyre CR, Gidding H, Turnbull F, Burgess MA and Gay N. A mathematical model to measure the impact of the Measles Control Campaign on the transmission dynamics of measles in Australia (abstract). Communicable Diseases Control Conference 2001, Canberra 2–3rd April 2001, Program Handbook: 57.
5. Immunise Australia Program. *Let's work together to beat measles: a report on Australia's measles control campaign*. Canberra: Commonwealth Department of Health and Aged Care, 2000.
6. Chin J (editor). *Control of Communicable Diseases Manual*, 17th edition. Washington DC: American Public Health Association, 2000.
7. Bellini WJ. Rota PA. Genetic diversity of wild-type measles viruses: implications for global measles elimination programs. *Emerg Infect Dis* 1998; 4(1): 29–35.
8. Andrews R. Measles outbreak among young adults in Victoria. *Comm Dis Intell* 2001; 25(1); 12.
9. NSW Department of Health. Communicable Diseases, NSW: December 2000. *NSW Public Health Bulletin* 2000; 11(12): 221.
10. Infectious Diseases Team and Director, South Eastern Sydney Public Health Unit. Outbreak report: measles cluster in south-eastern Sydney with transmission in a general practice waiting room. *Comm Dis Intell* 2001; 25(1); 19.
11. De Serres G, Gay NJ, Farrington CP. Epidemiology of Transmissible Diseases after Elimination. *Am J Epidemiol* 2000;151:1039–48.
12. Department of Communicable Disease Surveillance and Response, World Health Organisation. *WHO Recommended Surveillance Standards*. Second edition–October 1999. BO5 Measles. www.who.int/emc-documents/surveillance/whocdscsrisr992c.html.
13. Communicable Diseases Network Australia and New Zealand. *Guidelines for the control of measles outbreaks in Australia, July 2000*. Canberra: Commonwealth Department of Health and Aged Care, 2000.
14. Campbell M. Young adult measles vaccination (editorial). *Comm Dis Intell* 2000; 24(8): 241–2.
15. Health Insurance Commission. *Australian Childhood Immunisation Register*. Canberra: Health Insurance Commission, 31 March 2001.
16. Orenstein WA, Strebel PM, Papania M, Sutter RW, Bellini WJ and Cochi SL. Measles eradication: Is it in Our Future? *Am J Public Health* 2000; 90: 1521–5.
17. Hanna J, Richards A, Young D, Hills S, Humphreys J. Measles in health care facilities: some salutary lessons. *Comm Dis Intell* 2000; 24(7): 211–2.

COMMUNICABLE DISEASES, NSW: JULY 2001

TRENDS

Notifications of illness caused by the mosquito-borne **Barmah Forest infection** increased during the three months to May in the Mid North Coast Area, where 51 cases were reported for May (Table 5). Fewer reports were received for this disease in other areas. In contrast, notifications for **Ross River virus infections** declined during the same period; and Hunter, Mid North Coast and Central Coast Areas, which are all on the coast north of Sydney, received the most reports of this illness.

This month we look at some data derived from the early stages of surveillance of **invasive pneumococcal disease** (IPD) and **shigellosis** (Figure 1). These conditions became notifiable by laboratories in early 2001. Data received suggest that the risk of **IPD** is higher among infants, and perhaps rural dwellers, although it is possible that statewide data is incomplete as all laboratories may not yet be prepared for reporting to their public health units. In contrast, data received on **shigellosis** cases suggests that it is overwhelmingly transmitted among Sydney men. Seventy-four per cent of case notifications (32 of a total of 43 cases) were in residents of South Eastern Sydney. In 2000, an outbreak of shigellosis was identified among men who have sex with men in inner Sydney. The identification was linked to venues that allow sex on premises.[1,2] The risk for shigella infection can be reduced by careful attention to hand-washing, especially after using the toilet, before handling food, before and after sex, and by avoiding contact with faecally-contaminated materials.

Laboratory staff are urged to check with their local public health unit to ensure that they are complying with notification requirements for these and other notifiable conditions.

REFERENCES

1. NSW Department of Health. Shigellosis outbreak among inner Sydney men. *NSW Public Health Bulletin* 2000; 11: 158.
2. O'Sullivan B, Delpech V, Pontivivo G, McAnulty J. An outbreak of shigellosis among homosexual men linked to sex on premises venues. Abstract 31. Canberra: Communicable Diseases Control Conference, 2–3 April 2001 (unpublished).

INVASIVE PNEUMOCOCCAL DISEASE IN NSW

Julia Brotherton and Sue Campbell-Lloyd

In 2001, invasive pneumococcal disease has become a laboratory notifiable disease in NSW. This will allow the epidemiology of the disease to be monitored, and will inform prevention strategies.

The bacteria *S. pneumoniae* causes localised infections of the respiratory tract (in particular otitis media and sinusitis) as well as invasive disease causing systemic illness, commonly manifested as bacteraemia, pneumonia or meningitis. Only invasive disease is notifiable. A confirmed case is defined by the isolation of *S. pneumoniae* from a normally sterile site (for example, from blood culture, cerebrospinal fluid, joint fluid, peritoneal, pleural or pericardial fluid) by either culture or nucleic acid tests such as polymerase chain reaction (PCR). Isolation of *S. pneumoniae* from a non-sterile site (such as sputum, nasal aspirates and ear discharge) is not notifiable.

Methods

We reviewed existing data describing the epidemiology of invasive pneumococcal disease in NSW by analysing data from the NSW Inpatient Statistics Collection for the six-year period from mid 1994 to mid 2000. Admissions to hospital in NSW residents with invasive pneumococcal disease were examined by identifying those admissions with diagnostic codes for pneumococcal meningitis and pneumococcal sepsis (ICD-9 codes 320.1 or 038.2). Pneumococcal pneumonia cases were not considered. Population rates were calculated using NSW 1998 mid-year population estimates from the Australian Bureau of Statistics (ABS). Population rates for Aboriginal or Torres Strait Islander people were calculated using 1996 ABS census data.

TABLE 1

FREQUENCY AND AVERAGE ANNUAL RATES OF HOSPITALISATION WITH PNEUMOCOCCAL SEPSIS OR PNEUMOCOCCAL MENINGITIS IN NSW RESIDENTS, BY AGE GROUP AND AREA, FOR THE FINANCIAL YEARS 1994–00

Characteristic	Total hospitalisations	Average annual rate per 100,000
Age		
0–4	515	19.7
5–9	38	1.4
10–14	10	0.4
15–19	9	0.3
20–24	17	0.6
25–29	33	1.1
30–34	35	1.2
35–39	54	1.8
40–44	44	1.6
45–49	50	1.9
50–54	47	2.0
55–59	39	2.2
60–64	57	3.7
65–69	82	5.7
70–74	79	6.0
75–79	100	10.0
80–84	106	17.1
85+	89	19.1
Area of residence		
Central Sydney	117	4.0
Northern Sydney	206	4.5
Western Sydney	141	3.5
Wentworth	56	3.0
South Western Sydney	181	4.0
Central Coast	97	5.8
Hunter	102	3.2
Illawarra	70	3.4
South Eastern Sydney	169	3.7
Northern Rivers	38	2.5
Mid North Coast	46	3.0
New England	47	4.5
Macquarie	12	1.9
Mid-Western	37	3.7
Far West	9	3.1
Greater Murray	40	2.6
Southern	36	3.3
TOTAL NSW	**1404**	**3.7**

Source: NSW Inpatient Statistics Collection

Results

The average annual rate of hospitalisation with invasive pneumococcal disease for NSW residents for the six-year period was 3.7 hospitalisations per 100,000 population (Table 1). Highest rates were seen in children under 5 years of age (19.7 hospitalisations per 100,000 children) and in the very elderly (19.1 per 100,000 persons aged 85 years or over). Of the 515 cases identified in children under the age of five, 14 children were identified as being of Aboriginal or Torres Strait Islander background. Using 1996 ABS population estimates this gives a rate of 14.2 hospitalisations per 100,000 Aboriginal or Torres Strait Islander children under five years of age, compared to a rate of 19.7 per 100,000 children of non-Aboriginal or Torres Strait Islander background.

Comment

The limitations of using hospitalisation data include reliance on the correct coding of admissions, the probable under reporting of Aboriginal or Torres Strait Islander status, and possible variance in operational definitions used by coders in different area health services. The data does however demonstrate clear differences in hospitalisation rates with pneumococcal meningitis and pneumococcal sepsis by age group, consistent with both national and international data.[1,2] Geographically, it does not appear that the Far West Area of NSW has disease rates

similar to Central Australian regions, where the burden of illness amongst Aboriginal children is particularly high.[1] Hospitalisation data is an under representation of the true burden of illness due to invasive pneumococcal disease in NSW, and it will be of great interest to compare notification data with hospitalisation data as it becomes available.

The Australian Technical Advisory Group on Immunisation has recently recommended the introduction of a new conjugate pneumococcal vaccine on the Australian Standard Vaccination Schedule for Aboriginal and Torres Strait Islander children. The National Health and Medical Research Council has sought public comment on the recommendations as part of its consultation phase and the vaccination schedule will be announced in the near future. The vaccine was released onto the private market in May 2001 and has been licensed by the Therapeutic Goods Administration for use as a four dose schedule at two, four, six and 18 months of age.

References

1. National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases. Vaccine preventable diseases and vaccination coverage in Australia, 1993-1998. *Comm Dis Intell* 2000; June supplement.
2. Robinson KA, Baughman W, Rothrock G, Barrett NL, Pass M, Lexau C et al. Epidemiology of Invasive *Streptococcus pneumoniae* Infections in the United States, 1995–1998: Opportunities for prevention in the conjugate vaccine era. *JAMA* 2001; 285: 1729–35.

FOOT-AND-MOUTH DISEASE: PUBLIC HEALTH IMPLICATIONS

Tracey Oakman

The recent outbreak of foot-and-mouth disease in the United Kingdom has wide implications for disease control in Australia, including the control of the disease in humans.

Foot-and-mouth disease affects all cloven-hoofed animals, including: pigs, sheep, goats, cattle and deer; and is a highly contagious animal disease. It is caused by a virus of the Picornaviridae family and is a zoonosis infection.[1] The last recorded case of foot-and-mouth disease in Australia was in 1872.[2]

Foot-and-mouth disease can affect humans. The illness can cause malaise, headaches, skin itch, and vesicles on the mucous membranes of the hands and feet. Clinically it may resemble hand, foot and mouth disease.[3] Occurrence in humans is rare.[1] The incubation period is 2–6 days and symptoms are usually mild and self-limiting.[1] Person-to-person spread has not been reported. Suspected and confirmed cases should not have contact with susceptible livestock to avoid transmission of the disease.[1]

In March 2001, the surveillance officer at the Albury Centre for Public Health was contacted by a local pathologist. The pathologist was concerned that a person had been admitted to a local hospital with blisters around his mouth and on his feet. The patient had recently returned to Australia from a trip to England and Scotland where he was working with pigs and shoeing horses. The patient was in London for two days prior to flying to Australia.

Three days after his arrival in Australia, the patient presented to hospital with temperature, influenza-like symptoms, sore neck, and a rash that had started around the mouth and had then moved to the torso and feet. Doctors suspected meningococcal disease.

The man was admitted to hospital and cerebro-spinal fluid and blood cultures were sent to pathology for analysis. No indication of meningococcal disease was found.

Two days later, clinical symptoms—including the severity of illness—indicated that the patient was suffering from a varicella-zoster virus infection; however, because of his travels, foot-and-mouth disease could not be ruled out. The patient had no previous history of chicken pox. After consultation with the NSW Department of Health and the NSW Department of Agriculture, blood was collected and sent for varicella-zoster testing. These results were negative for varicella-zoster virus IgM and IgG. The NSW Department of Agriculture expressed an interest in obtaining the acute and a convalescent sera for testing for foot-and-mouth disease. A second specimen of serum was positive for IgM and IgG for varicella-zoster virus. Specimens referred to the Australian Animal Health Laboratory, Geelong, were negative for foot-and-mouth disease.

Varicella-zoster IgM is usually elevated within five days of infection.[4] Collection of the first specimen would have been at about day three from the onset of infection and may explain the first negative test. Testing the specimens for foot-and-mouth disease demonstrated the commitment by the NSW Department of Agriculture to thoroughly investigate any suspected case of foot-and-mouth disease in Australia.

From a public health perspective, if a patient presents for medical attention with a history of exposure to foot-and-mouth disease, and with the consistent symptoms, serology should be ordered requesting testing for foot-and-mouth disease. Arrangements for tests can be made with the Australian Animal Health Laboratory in Geelong. The patient should be advised to remain isolated from animals until a diagnosis is made.

Acknowledgment

Dr David Blaxland, for the initial disease notification.

References

1. Hungerford TG. *Diseases of Livestock*, eight edition. Sydney: Booth & Son, 1975.
2. Prempeh H, Smith R, Muller B. Foot-and-mouth disease: the human consequences. *BMJ* 2001; 322; 565–566.

TABLE 2

NEW DIAGNOSES OF HIV INFECTION REPORTED, NSW, 1981 TO MARCH 2001

Characteristic	Period of diagnosis 1981–1990		1991–2000		Jan–Mar 2001		Total	
	N	(%)	*N*	(%)	*N*	(%)	*N*	(%)
Gender								
Male	6396	(93.0)	4815	(91.9)	75	(83.3)	11286	(92.5)
Female	284	(4.1)	342	(6.5)	13	(14.4)	639	(5.2)
Other	200	(2.9)	80	(1.5)	2	(2.2)	282	(2.3)
Age								
0–2	16	(0.2)	22	(0.4)	0	(0)	38	(0.3)
3–12	33	(0.5)	9	(0.2)	0	(0)	42	(0.3)
13–19	177	(2.6)	76	(1.4)	1	(1.1)	254	(2.1)
20–29	2475	(36.0)	1609	(30.7)	26	(28.9)	4110	(33.7)
30–39	2516	(36.6)	1982	(37.9)	38	(42.2)	4536	(37.2)
40–49	1177	(17.1)	994	(19.0)	15	(16.7)	2186	(17.9)
50–59	330	(4.8)	353	(6.7)	3	(3.3)	686	(5.6)
60+	125	(1.8)	119	(2.3)	3	(3.3)	247	(2.0)
Not reported	31	(0.5)	73	(1.4)	4	(4.4)	108	(0.9)
Exposure								
Male homosexual–Bisexual	3689	(53.6)	3347	(63.9)	37	(41.1)	7073	(57.9)
Male homosexual–Bisexual–IDU	102	(1.5)	164	(3.1)	1	(1.1)	267	(2.2)
Injecting drug use	196	(2.9)	162	(3.1)	1	(1.1)	359	(2.9)
Heterosexual	195	(2.8)	693	(13.2)	16	(17.8)	904	(7.4)
Haemophilia–Coagulation disorder	109	(1.6)	7	(0.1)	0	(0)	116	(1.0)
Blood–Tissue recipiant	89	(1.3)	28	(0.5)	0	(0)	117	(1.0)
Needle-stick injury	0	(0)	4	(0.1)	0	(0)	4	(0)
Vertical	6	(0.1)	27	(0.5)	0	(0)	33	(0.3)
Not Stated	2494	(36.3)	805	(15.4)	35	(38.9)	3334	(27.3)
Residence								
Sydney	2699	(39.2)	3815	(72.8)	52	(57.8)	6566	(53.8)
Rural	244	(3.5)	523	(10.0)	11	(12.2)	778	(6.4)
Unknown	3937	(57.2)	899	(17.2)	27	(30)	4863	(39.8)
Total	**6880**	**(100)**	**5237**	**(100)**	**90**	**(100)**	**12207**	**(100)**

3. Animal Health Australia. Bulletin 5/2001. National Animal Health Information System www.aahc.com.au.
4. Varilrix, product monograph 1998; 16.

20 YEARS OF AIDS

Twenty years ago, on 5 June 1981, the *Morbidity and Mortality Weekly Report* first reported a cluster of pneumocystis pneumonia in five homosexual men in Los Angeles.[1] The AIDS epidemic ensued. By the end of 2000, more people (21.8 million) had died of AIDS than in both World Wars combined.[2]

Things have improved a little in recent years, most notably through effective prevention efforts (especially safe sex and needle-and-syringe programs) and the development of highly-effective antiretroviral therapies. But still there is no cure, and no vaccine, and there are no affordable therapies in those developing countries with the highest burden of disease. There are indications that drug resistant strains of the HIV virus may emerge;[3] while increases in notifications of sexually transmissible infections, such as gonorrhoea and chlamydia, indicate a rise in high risk behaviours that lead to HIV infection. There is also increasing complacency about HIV infection, which is a risk factor in itself.

In NSW, there are still around 400 people who are newly-infected with HIV each year. To the end of March 2001, the cumulative number of HIV diagnoses in NSW was 12,207. The total number of HIV diagnoses for 2000 was 368 compared to 396 in 1999 and 416 in 1998. The characteristics of these cases is summarised in Table 2. Risk exposure information was poorly reported for the period 1981–1990. For the period 1991–2000, male-to-male sex was reported by 64 per cent of cases, injecting drug use by three per cent, and heterosexual sex by 13 per cent. Ninety notifications were received for the first quarter of 2001; however, risk information was not yet available for 39 per cent of these.

To the end of March 2001, the cumulative number of AIDS cases and deaths in NSW was 4884 and 3323. The characteristics of these cases appears in Tables 3 and 4.

References

1. Centers for Disease Control and Prevention. *Pneumocystis* pneumonia—Los Angeles. *Morbidity and Mortality Weekly Report* 1981; 30: 250–2.
2. Sepkowitz KA. AIDS—the first 20 years. *New Engl J Med* 2001; 344: 1764–1772.
3. United Kingdom Collaborative Group on Monitoring the Transmission of HIV Drug Resistance. Analysis of prevalence of HIV-1 drug resistance in primary infections in the United Kingdom. *BMJ* 2001; 322: 1087–1088.

TABLE 3

DIAGNOSES OF AIDS REPORTED, NSW, 1981 TO MARCH 2001

Characteristic	Period of diagnosis 1981–1990		1991–2000		Jan–Mar 2001		Total	
	N	(%)	*N*	(%)	*N*	(%)	*N*	(%)
Gender								
Male	1569	(97.0)	3094	(94.9)	6	(85.7)	4669	(95.6)
Female	46	(2.8)	157	(4.8)	1	(14.3)	204	(4.2)
Other	2	(0.1)	9	(0.3)	0	(0)	11	(0.2)
Age								
0–2	0	(0)	7	(0.2)	0	(0)	7	(0.1)
3–12	6	(0.4)	6	(0.2)	0	(0)	12	(0.3)
13–19	10	(0.6)	5	(0.2)	0	(0)	15	(0.3)
20–29	332	(20.5)	490	(15.0)	0	(0)	822	(16.8)
30–39	655	(40.5)	1380	(42.3)	4	(57.1)	2039	(41.8)
40–49	430	(26.6)	937	(28.7)	0	(0)	1367	(28.0)
50–59	131	(8.1)	337	(10.3)	2	(28.6)	470	(9.6)
60+	53	(3.3)	98	(3.0)	1	(14.3)	152	(3.1)
Not reported	0	(0)	0	(0)	0	(0)	0	(0)
Exposure								
Male homosexual–Bisexual	1394	(86.2)	2560	(78.5)	6	(85.7)	3960	(81.1)
Male homosexual–Bisexual/IDU	53	(3.3)	130	(4.0)	0	(0)	183	(3.8)
Injecting drug use	5	(0.3)	42	(1.2)	0	(0)	47	(1.0)
Heterosexual	51	(3.2)	325	(10.0)	1	(14.3)	377	(7.7)
Haemophilia–Coagulation disorder	27	(1.7)	24	(0.7)	0	(0)	51	(1.0)
Blood–Tissue recipient	62	(3.8)	44	(1.4)	0	(0)	106	(2.2)
Vertical	2	(0.1)	12	(0.4)	0	(0)	14	(0.3)
Not Stated	23	(1.4)	123	(3.8)	0	(0)	146	(3.0)
Residence								
Sydney	1335	(82.6)	2706	(83.0)	6	(85.7)	4047	(82.9)
Rural	156	(9.6)	522	(16.0)	1	(14.3)	679	(13.9)
Unknown	126	(7.8)	32	(1.0)	0	(0)	158	(3.2)
Total	**1617**	**(100)**	**3260**	**(100)**	**7**	**(100)**	**4884**	**(100)**

TABLE 4

AIDS DEATHS REPORTED, NSW, 1981 TO MARCH 2001

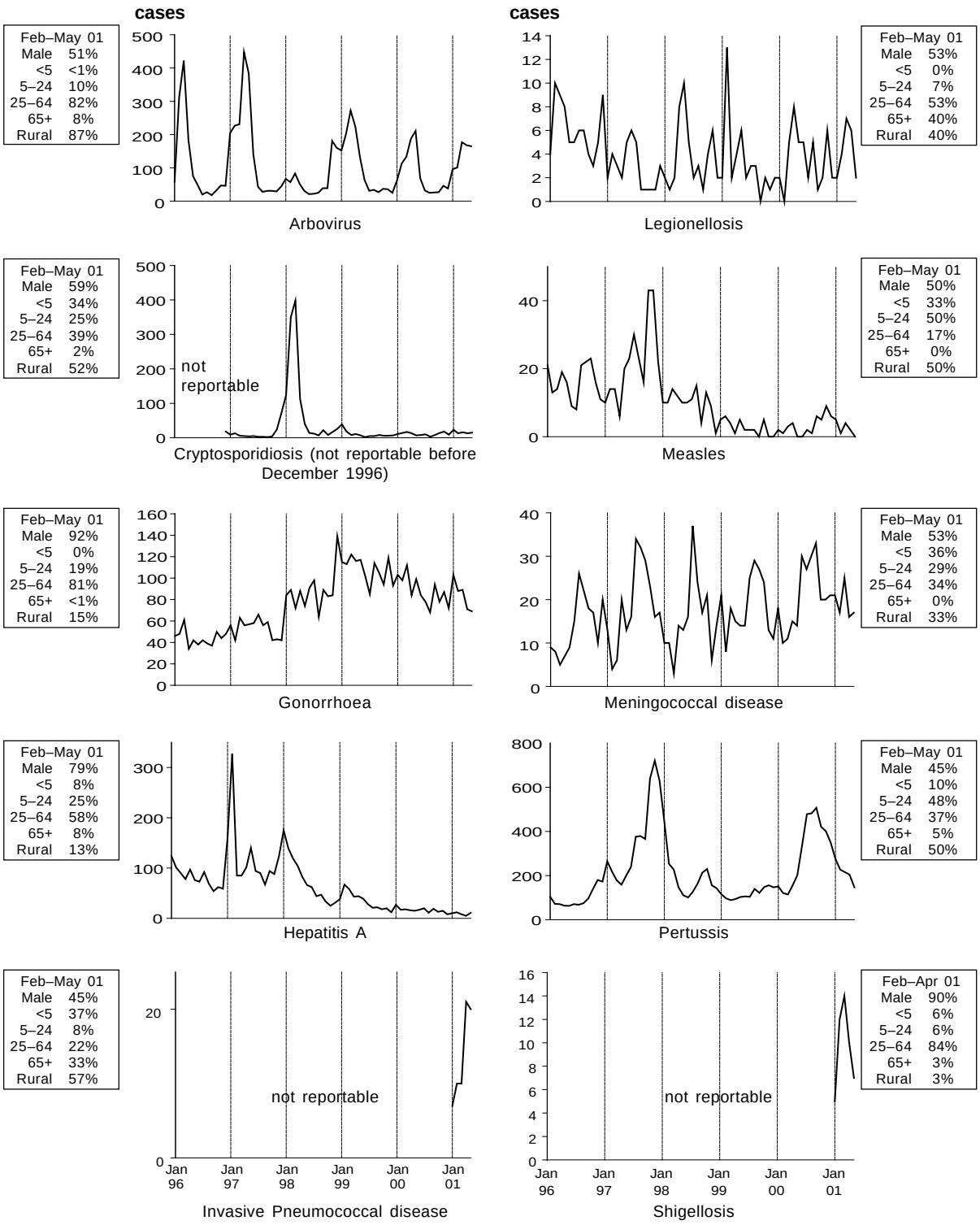
Characteristic	Period of diagnosis 1981–1990		1991–2000		Jan–Mar 2001		Total	
	N	(%)	*N*	(%)	*N*	(%)	*N*	(%)
Gender								
Male	960	(96.7)	2237	(96.2)	3	(75.0)	3200	(96.3)
Female	32	(3.2)	83	(3.6)	1	(25.0)	116	(3.5)
Other	1	(0.1)	6	(0.2)	0	(0)	7	(0.2)
Age								
0–2	0	(0)	3	(0.1)	0	(0)	3	(0.1)
3–12	4	(0.4)	5	(0.2)	0	(0)	9	(0.3)
13–19	5	(0.5)	6	(0.3)	0	(0)	11	(0.3)
20–29	184	(18.5)	392	(16.9)	0	(0)	576	(17.3)
30–39	401	(40.4)	953	(41.0)	3	(75.0)	1357	(40.8)
40–49	271	(27.3)	677	(29.1)	1	(25.0)	949	(28.6)
50–59	90	(9.1)	215	(9.2)	0	(0)	305	(9.2)
60+	38	(3.8)	75	(3.2)	0	(0)	113	(3.4)
Not reported	0	(0)	0	(0)	0	(0)	0	(0)
Exposure								
Male homosexual–Bisexual	862	(86.8)	1898	(81.6)	2	(50.0)	2762	(83.1)
Male homosexual–Bisexual–IDU	28	(2.8)	98	(4.2)	1	(25.0)	127	(3.8)
Injecting drug use	1	(0.1)	19	(0.8)	0	(0)	20	(0.6)
Heterosexual	23	(2.3)	164	(7.1)	1	(25.0)	188	(5.7)
Haemophilia–Coagulation disorder	17	(1.7)	28	(1.2)	0	(0)	45	(1.4)
Blood–Tissue recipient	47	(4.8)	43	(1.8)	0	(0)	90	(2.7)
Vertical	1	(0.1)	6	(0.3)	0	(0)	7	(0.2)
Not Stated	14	(1.4)	70	(3.0)	0	(0)	84	(2.5)
Residence								
Sydney	818	(82.4)	1951	(83.9)	4	(100.0)	2773	(83.5)
Rural	73	(7.3)	347	(14.9)	0	(0)	420	(12.6)
Unknown	102	(10.3)	28	(1.2)	0	(0)	130	(3.9)
Total	**993**	**(100)**	**2326**	**(100)**	**4**	**(100)**	**3323**	**(100)**

FIGURE 1

REPORTS OF SELECTED COMMUNICABLE DISEASES, NSW, JANUARY 1996 TO MAY 2001, BY MONTH OF ONSET

These are preliminary data: case counts for recent months may increase because of reporting delays. Laboratory-confirmed cases, except for measles, meningococcal disease and pertussis.

NSW population	
Male	50%
<5	7%
5–24	28%
25–64	52%
65+	13%
Rural*	42%



* For definition, see *NSW Public Health Bulletin*, April 2000

TABLE 5 REPORTS OF NOTIFIABLE CONDITIONS RECEIVED IN MAY 2001 BY AREA HEALTH SERVICES

Condition	Area Health Service (2001) CSA	NSA	WSA	WEN	SWS	CCA	HUN	ILL	SES	NRA	MNC	NEA	MAC	MWA	FWA	GMA	SA	CHS	Total for May†	Total To date†
Blood-borne and sexually transmitted																				
AIDS	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	3	51
HIV infection*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33
Hepatitis B - acute viral*	-	-	-	-	3	-	-	-	2	-	-	-	-	-	-	1	-	-	6	38
Hepatitis B - other*	24	56	2	14	1	1	9	7	63	3	2	4	5	1	1	2	7	8	211	1,549
Hepatitis C - acute viral*	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	51
Hepatitis C - other*	81	40	-	20	-	17	42	36	118	3	24	13	7	2	-	25	44	49	523	3,495
Hepatitis D - unspecified*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	8
Hepatitis, acute viral (not otherwise specified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chancroid*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlamydia (genital)*	7	23	26	19	-	13	21	13	94	1	10	16	9	10	2	16	6	4	293	1,661
Gonorrhoea*	-	8	7	-	-	1	1	3	60	1	1	5	1	-	1	-	2	2	93	456
Syphilis	14	-	10	2	-	1	-	1	21	4	1	1	1	-	-	1	1	2	61	244
Vector-borne																				
Arboviral infection (BFV)*	-	-	-	-	-	-	-	2	-	2	51	1	-	-	-	1	3	-	60	162
Arboviral infection (RRV)*	2	3	4	5	-	23	52	7	1	5	26	3	3	-	4	4	3	-	145	525
Arboviral infection (Other)*	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	8	19
Malaria*	-	3	-	-	-	2	2	-	1	-	-	-	-	-	-	-	-	-	8	66
Zoonoses																				
Anthrax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis*	-	2	-	-	-	-	-	-	1	-	5	-	-	-	-	-	-	-	8	32
Lyssavirus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psittacosis	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	3	12
Q fever*	-	-	1	-	-	-	2	-	-	-	3	-	3	-	-	-	1	-	10	54
Respiratory and other																				
Blood lead level*	-	-	-	-	-	1	4	1	3	-	-	1	-	-	11	-	1	-	22	207
Influenza	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	7
Invasive Pneumococcal Infection	-	10	1	3	-	3	4	3	-	-	1	-	-	-	-	-	-	-	25	67
Legionnaires' Longbeachae*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	10
Legionnaires' Pneumophila*	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	13
Legionnaires' (Other)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Meningococcal infection (invasive)	3	1	4	1	2	2	-	2	5	1	-	-	1	-	-	-	1	-	23	102
Mycobacterial tuberculosis	3	5	6	1	-	1	-	-	12	-	-	-	-	-	-	1	-	-	29	157
Mycobacteria other than TB	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	19
Vaccine-preventable																				
Adverse event after immunisation	-	3	-	-	-	1	-	1	3	-	-	-	-	-	-	-	-	-	8	35
H.influenzae b infection (invasive)*	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	3
Measles	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	13
Mumps*	-	2	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	5	14
Pertussis	23	26	12	23	25	8	30	12	48	25	6	11	20	9	-	8	2	-	288	1,318
Rubella*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	35
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Faecal-oral																				
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cryptosporidiosis*	-	1	-	1	-	-	1	-	5	3	1	3	2	-	-	-	2	-	19	85
Giardiasis*	-	9	6	5	-	1	13	2	14	5	2	2	1	1	-	5	-	-	67	426
Food borne illness (not otherwise specified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
Gastroenteritis (in an institution)	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	22	215
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Hepatitis A*	4	3	4	-	-	-	-	-	2	1	1	-	-	-	-	-	-	-	15	54
Hepatitis E*	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7
Listeriosis*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	10
Salmonellosis (not otherwise specified)*	7	16	18	4	-	2	11	2	16	3	8	6	3	4	1	4	3	-	109	772
Shigellosis	-	1	-	-	-	-	-	-	10	-	-	-	-	-	-	-	1	-	12	49
Typhoid and paratyphoid*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	18
Verotoxin producing Ecoli*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* lab-confirmed cases only † includes cases with unknown postcode

CSA = Central Sydney Area
NSA = Northern Sydney Area
WSA = Western Sydney Area
WEN = Wentworth Area
SWS = South Western Sydney Area
CCA = Central Coast Area
HUN = Hunter Area
ILL = Illawarra Area
SES = South Eastern Sydney Area
NRA = Northern Rivers Area
MNC = North Coast Area
NEA = New England Area
MAC = Macquarie Area
MWA = Mid Western Area
FWA = Far West Area
GMA = Greater Murray Area
SA = Southern Area
CHS = Corrections Health Service