

# YEAR IN REVIEW: COMMUNICABLE DISEASE SURVEILLANCE, 2000

In this issue, we review the trends in reports of notifiable diseases received by the NSW Department of Health for 2000. Readers interested in the details of specific diseases should review Tables 1 to 4 for notifications of disease reports by year, month, area of residence, and age group and sex.

## TRENDS

Among the 30,020 people with medical conditions notified by doctors, hospital staff, and laboratories for 2000:

### Conditions most frequently reported

- hepatitis C (7,513 cases [116/100,000 population], with the highest crude rates among residents who live within the Western Sydney, Mid Western NSW, and Central Sydney area health services);
- hepatitis B (4,008 cases [62/100,000], with the highest crude rates among residents who live within the South West Sydney, Central Sydney and the Far Western area health services);
- pertussis (3,682 cases [57/100,000], with the highest crude rates among residents who live within the Hunter, Mid Western and Macquarie area health services);
- chlamydia (3,464 cases [54/100,000], with the highest crude rates among residents who live within the Far Western, South Eastern Sydney and Central Sydney area health services);

### Conditions with the most important declines in notifications over previous years

- AIDS (102 cases, down from a peak of 533 cases in 1994) and HIV infection (367 cases, steadily declining since the mid-1980s): both declines are most likely due to effective new therapies for HIV infection;
- hepatitis A (195 cases, the lowest number since laboratory reporting for hepatitis A began in 1991): possibly due to relatively high levels of immunity within the community through past infection or immunisation, or possibly due to improved hygiene;
- Q fever (down to 128 cases from a peak of 404 cases in 1993): possibly due to higher immunisation rates among abattoir workers;
- salmonellosis (1,387 cases, down from a peak of 1,811 cases in 1998);

### Conditions with the most important increases over previous years

- pertussis (3,682 cases, up from 1,414 cases in 1999): due to an epidemic mainly in older children and adults;
- chlamydia (3,464 cases, up from 2,438 cases in 1999): perhaps related to improved reporting by laboratories, and ongoing risk activities among sexually active men and women;

- rubella (190 laboratory confirmed cases, up from 46 cases in 1999): largely related to an outbreak among non-immunised adult males;

### Conditions least frequently reported

There were no reported cases of botulism, chancroid, cholera, diphtheria, lymphogranuloma venereum (LGV), donovanosis, plague, polio, rabies, typhus, viral haemorrhagic fevers, or yellow fever.

## OUTBREAKS

Several important disease outbreaks were reported in 2000 in NSW. These include:

- an outbreak of shigellosis among gay men in inner Sydney;<sup>1</sup>
- a large outbreak of pertussis affecting mainly older children and adults statewide;<sup>2</sup>
- an outbreak of influenza among persons aboard a South Pacific cruise ship;<sup>3</sup>
- two clusters of acute post streptococcal glomerular nephritis among children in rural and urban NSW.<sup>4</sup>

## POLICY DEVELOPMENT

In 2000, the NSW Department of Health's Communicable Diseases Surveillance and Control Unit (CDSCU) led the development of several important strategies for the control and prevention of communicable diseases in NSW, including:

- surveillance and control for communicable diseases that occurred during the period of the Olympic Games and the Paralympic Games;<sup>5</sup>
- a revised Notifiable Diseases Manual to assist public health investigations;
- new surveillance systems for anthrax, influenza, invasive pneumococcal diseases, lyssavirus infection, psittocosis and shigellosis, which became notifiable conditions in NSW
- development of communicable disease control priorities for NSW;<sup>6</sup>
- development of policy on health care worker protection;
- development of policy of the prevention of tuberculosis in health care workers;<sup>7</sup>
- development of a new intranet page on Communicable Disease Control for staff of NSW Health at [internal.health.nsw.gov.au/public-health/cdscu](http://internal.health.nsw.gov.au/public-health/cdscu);
- development and installation of a new version of Notifiable Diseases Database in public health units;
- release of the Chest Clinic Surveillance System database Version 2.

## TRAINING AND INFORMATION

In 2000, the CDSCU facilitated training for public health professionals in communicable disease control and developed new information resources, including:

- the NSW Communicable Disease Control Workshop for public health units, laboratories and trainees;
- the NSW Tuberculosis Conference;
- Bug Breakfast seminars for public health professionals in NSW;
- supervision of two trainees in the NSW Public Health Officer Training Program;
- teaching students of public health and medicine at the Universities of Sydney and New South Wales;
- new fact sheets on headlice, chickenpox, hepatitis C, parvovirus B19 and fifth disease, meningococcal disease, Ross River virus infection, tuberculosis, hepatitis A, whooping cough and influenza ([www.health.nsw.gov.au](http://www.health.nsw.gov.au));
- epidemiological reviews on meningococcal disease, tuberculosis, arboviruses, and HIV and AIDS ([www.health.gov.au/public-health/phb/phb.html](http://www.health.gov.au/public-health/phb/phb.html)).

## PROGRESS ON PRIORITY AREAS

In 2000, the CDSCU identified seven priority areas for development in NSW.<sup>6</sup> Here we report on progress on these across the state:

- *eliminate the transmission of measles*: 20 laboratory-confirmed and 12 other cases in 2000. Seven measles cases were thought to have been acquired overseas, including three in overseas visitors to Australia;
- *eliminate congenital rubella*: no cases in 2000;
- *eliminate congenital syphilis*: one case in 2000;
- *monitor risk factors for new hepatitis C infections*: 138 acute cases reported. Risk factor data on acute cases have been investigated by many public health units and will be reported in a future issue of the *NSW Public Health Bulletin*;
- *better understand risk factors for invasive pneumococcal disease (IPD)*: IPD became a notifiable disease at the end of 2000;
- *minimise the incidence and management of multi-drug resistant tuberculosis (MDR-TB)*: six cases were identified in 2000. The management of all cases were reviewed by an expert panel;
- *minimise the risk of communicable disease infections related to the Olympic and Paralympic Games in Sydney*: a comprehensive surveillance system was

developed.<sup>7</sup> No communicable disease outbreaks were identified related to the Olympic or Paralympic Games.

## INITIATIVES FOR 2001

To strengthen communicable disease control activities in 2001, the following initiatives were planned:

- development of protocols for the response of public health units to reports of anthrax, psittacosis, invasive pneumococcal disease, influenza and shigellosis;
- a training workshop for public health workers in outbreak investigation and management;
- streamlining of HIV data collection, analysis and reporting;
- analysis of risk factors among new cases of hepatitis C;
- release of the Web page for communicable disease control.

## A BIG THANK YOU

Disease control and prevention depends on effective surveillance of communicable diseases in the community. The CDSCU would like to thank all those general and specialist medical practices, laboratories, hospitals, schools, childcare centres, and others, who have notified diseases of public health significance to their local public health units for investigation and control.

## REFERENCES

- 1 NSW Department of Health. Shigellosis outbreak among inner-Sydney men. *NSW Public Health Bulletin* 2000; 11: 158.
- 2 NSW Department of Health. Pertussis on the rise. *NSW Public Health Bulletin* 2000; 11: 174.
- 3 NSW Department of Health. Outbreak of influenza-like illness on board a cruise ship. *NSW Public Health Bulletin* 2000; 11: 194–195.
- 4 Muscatello DJ, O'Grady KA, Neville K, McAnulty J. Acute poststreptococcal glomerulonephritis: Public health implications of recent clusters in NSW and epidemiology of hospital admissions. *Epidemiol Infect* 2001; 126: 365–372.
- 5 Thackway SV, Delpech VC, Jorm LR, McAnulty JM, Visotina M. Monitoring acute diseases during the Sydney 2000 Olympic and Paralympic Games. *Med J Aust* 2000; 173: 318–321.
- 6 NSW Department of Health. Draft priorities for communicable disease control in NSW, 2000. *NSW Public Health Bulletin* 2000; 11: 84–86.
- 7 NSW Department of Health. *Health care worker tuberculosis screening and protection policy*. Circular 2001/71; 1 August 2001. ☒

TABLE 1

## DISEASE NOTIFICATIONS BY YEAR OF ONSET, NSW, 1991 TO 2000

Conditions	Year of Onset										
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
AIDS	438	427	469	533	463	356	200	166	106	102	
Adverse event after immunisation	10	31	23	40	28	56	70	93	13	40	
Total Arboviral*	410	341	656	382	534	1226	1805	780	1217	964	
Barmah Forest virus infections*	6	6	25	40	271	172	187	134	249	189	
Ross River virus infections*	298	324	599	332	236	1032	1597	583	952	745	
NOS*	106	11	32	10	27	22	21	63	16	30	
Blood lead level >=15ug/dl*	not notifiable until December 1996						713	880	709	990	
Botulism	0	0	0	0	0	0	0	0	1	0	
Brucellosis*	2	2	4	4	2	1	3	3	2	1	
Chancroid	not notifiable until December 1998						0	0	1	0	
Chlamydia trachomatis infections*	not notifiable until August 1998						23	562	2438	3464	
Cholera*	1	0	1	0	1	3	1	1	2	0	
Cryptosporidiosis*	not notifiable until December 1996						157	1130	121	132	
Food-borne illness(NOS)	2744	253	106	213	270	211	255	201	151	125	
Gastroenteritis (institutional)	153	405	426	296	1359	554	939	737	635	640	
Giardiasis*	not notifiable until August 1998						2	1	403	1091	968
Gonorrhoea*	386	494	382	357	427	522	636	1048	1279	1048	
Total H.influenzae	211	219	124	61	29	13	17	11	13	8	
H.influenzae type b epiglottitis*	15	57	32	21	6	2	5	1	2	2	
H.influenzae type b meningitis*	47	104	53	17	11	4	3	3	3	1	
H.influenzae type b septicaemia*	11	26	24	12	8	3	1	4	6	4	
H.influenzae type b infection (NOS)*	138	32	15	11	4	4	8	3	2	1	
HIV infection*	811	711	602	510	540	462	435	413	389	367	
Haemolytic uraemic syndrome	not notifiable until December 1996						3	6	11	9	
Hepatitis A*	1120	903	579	586	615	958	1427	926	406	195	
Hepatitis B: acute viral*	412	115	96	75	63	43	52	53	63	94	
Hepatitis B: other*	1089	3131	3599	4033	4060	3549	3196	2988	3491	3914	
Hepatitis C: acute viral*	22	28	23	22	33	19	19	102	82	138	
Hepatitis C: other*	828	3963	6006	7997	6983	7109	7043	7262	7630	7375	
Hepatitis D*	0	8	12	19	19	9	11	3	13	10	
Hepatitis E*	0	0	1	2	0	3	6	4	7	9	
Total Legionnaires' disease	37	104	66	60	75	74	33	46	41	41	
L. longbeachae*	0	14	13	8	16	30	9	19	12	12	
L. pneumophila*	16	80	34	30	35	34	18	22	22	26	
NOS	21	10	19	22	24	10	6	5	7	3	
Leprosy	1	7	5	3	3	2	0	0	1	2	
Leptospirosis*	28	21	16	14	6	33	33	50	55	53	
Listeriosis*	11	13	12	10	14	22	23	28	22	18	
Malaria*	201	164	164	184	96	203	173	161	198	226	
Total Measles	493	808	2348	1484	596	191	273	119	32	32	
Laboratory confirmed cases*	20	76	460	302	138	35	98	19	13	20	
other	473	732	1888	1182	458	156	175	100	19	12	
Total Meningococcal	129	122	153	142	113	161	219	184	215	248	
Meningitis	54	94	98	80	72	99	109	56	109	105	
Septicaemia	16	19	44	41	27	41	67	77	71	78	
NOS	59	9	11	21	14	21	43	51	35	65	
Mumps*	8	23	13	11	14	27	29	39	32	92	
Mycobacterial infection: other than TB*	302	399	451	520	470	411	359	311	363	312	
Paratyphoid*	20	8	9	11	12	15	5	9	4	13	
Pertussis	50	217	1533	1408	1370	1157	4250	2311	1414	3682	
Q Fever*	166	213	404	267	202	287	258	236	164	128	
Total Rubella*	61	326	1186	233	2376	636	153	78	46	190	
Rubella*	60	326	1184	229	2375	631	153	78	45	190	
Rubella (Congenital)*	1	0	2	4	1	5	0	0	1	0	
Total Salmonella*	1172	805	980	1101	1366	1224	1698	1811	1423	1387	
Salmonella bovis morbificans infections*	19	21	32	24	15	13	25	40	22	39	
Salmonella typhimurium infections*	196	232	291	457	547	581	934	856	661	688	
Salmonella infections (NOS)*	957	552	657	620	804	630	739	915	740	660	
Total Syphilis	581	877	739	976	833	663	513	598	522	535	
Syphilis - >1 year duration*	1	2	6	29	135	71	57	44	90	76	
Syphilis - <1 year duration*	1	5	7	22	31	38	26	22	100	154	
Syphilis congenital	1	1	0	2	7	3	4	1	3	1	
Syphilis (NOS)*	578	869	726	923	660	551	426	531	329	304	
Tetanus	5	2	5	4	0	1	3	3	1	2	
Tuberculosis	430	394	389	394	443	410	422	384	478	439	
Typhoid*	38	20	28	24	27	30	28	18	32	26	
Verotoxin - producing <i>E. coli</i> infections*	not notifiable until December 1996						0	2	0	1	

\* Laboratory-confirmed cases only      NOS = Not Otherwise Specified

Following diseases have not been notified since 1991: Diphtheria\*, Granuloma inguinale\*, Lymphogranuloma venereum\*, Plague\*, Poliomyelitis\*, Rabies, Typhus\*, Viral haemorrhagic fever, Yellow fever.

TABLE 2

## DISEASE NOTIFICATIONS BY PUBLIC HEALTH UNIT AREA, NSW, 2000

Conditions	Health Area of residence											
	CSA		NSA		WSA		WEN		SWS		CCA	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
AIDS	22	4.5	13	1.7	8	1.2	2	0.6	7	0.9	2	0.7
Adverse event after immunisation	5	1.0	4	0.5	4	0.6	2	0.6	0	0.0	3	1.0
Total Arboviral*	6	1.2	17	2.2	11	1.6	5	1.6	11	1.4	20	6.8
Barmah Forest virus infections*	1	0.2	0	0.0	1	0.1	0	0.0	0	0.0	3	1.0
Ross River virus infections*	2	0.4	10	1.3	9	1.3	5	1.6	3	0.4	17	5.8
NOS*	3	0.6	7	0.9	1	0.1	0	0.0	8	1.0	0	0.0
Blood lead level >= 15ug/dl*	32	6.5	23	3.0	100	14.6	30	9.5	143	18.2	5	1.7
Brucellosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chlamydia trachomatis infections*	424	86.1	294	37.9	324	47.3	110	34.8	199	25.3	64	21.9
Cryptosporidiosis*	5	1.0	3	0.4	2	0.3	6	1.9	2	0.3	0	0.0
Food-borne illness (NOS)	34	6.9	4	0.5	3	0.4	0	0.0	5	0.6	1	0.3
Gastroenteritis (institutional)	107	21.7	0	0.0	70	10.2	84	26.6	0	0.0	0	0.0
Giardiasis*	55	11.2	121	15.6	99	14.4	45	14.2	74	9.4	40	13.7
Gonorrhoea*	209	42.4	80	10.3	66	9.6	19	6.0	77	9.8	15	5.1
Total H.influenzae type b	0	0.0	1	0.1	0	0.0	0	0.0	2	0.3	0	0.0
H.influenzae type b epiglottitis*	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
H.influenzae type b meningitis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
H.influenzae type b septicaemia*	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3	0	0.0
H.influenzae type b infection (NOS)*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
HIV infection*	84	17.1	18	2.3	27	3.9	8	2.5	25	3.2	6	2.1
Haemolytic uraemic syndrome	1	0.2	0	0.0	0	0.0	0	0.0	1	0.1	1	0.3
Hepatitis A*	35	7.1	23	3.0	26	3.8	20	6.3	20	2.5	5	1.7
Hepatitis B: acute viral*	6	1.2	8	1.0	5	0.7	7	2.2	11	1.4	0	0.0
Hepatitis B: other*	569	115.5	372	47.9	625	91.2	76	24.0	1362	173.5	35	12.0
Hepatitis C: acute viral*	12	2.4	32	4.1	0	0.0	17	5.4	1	0.1	1	0.3
Hepatitis C: other*	772	156.7	338	43.6	1193	174.1	355	112.3	1012	128.9	326	111.5
Hepatitis D*	0	0.0	0	0.0	1	0.1	0	0.0	4	0.5	0	0.0
Hepatitis E*	1	0.2	1	0.1	2	0.3	1	0.3	1	0.1	0	0.0
Total Legionnaires'	4	0.8	3	0.4	9	1.3	1	0.3	2	0.3	1	0.3
L.longbeachae*	0	0.0	0	0.0	2	0.3	1	0.3	2	0.3	0	0.0
L.pneumophila*	4	0.8	3	0.4	7	1.0	0	0.0	0	0.0	1	0.3
other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leprosy	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3	0	0.0
Leptospirosis*	0	0.0	2	0.3	0	0.0	0	0.0	0	0.0	1	0.3
Listeriosis*	2	0.4	1	0.1	1	0.1	1	0.3	3	0.4	1	0.3
Malaria*	20	4.1	36	4.6	12	1.8	11	3.5	55	7.0	2	0.7
Total Measles	4	0.8	6	0.8	2	0.3	2	0.6	5	0.6	1	0.3
Laboratory confirmed cases*	2	0.4	6	0.8	1	0.1	1	0.3	3	0.4	1	0.3
other	2	0.4	0	0.0	1	0.1	1	0.3	2	0.3	0	0.0
Total Meningococcal	16	3.2	21	2.7	26	3.8	15	4.7	31	3.9	18	6.2
Meningitis	10	2.0	8	1.0	13	1.9	7	2.2	12	1.5	4	1.4
Septicaemia	5	1.0	10	1.3	13	1.9	8	2.5	11	1.4	1	0.3
NOS	1	0.2	3	0.4	0	0.0	0	0.0	8	1.0	13	4.4
Mumps*	12	2.4	11	1.4	23	3.4	3	0.9	17	2.2	2	0.7
Mycobacterial infection: other than TB*	36	7.3	71	9.2	3	0.4	9	2.8	41	5.2	12	4.1
Paratyphoid*	0	0.0	3	0.4	5	0.7	0	0.0	1	0.1	0	0.0
Pertussis	109	22.1	298	38.4	337	49.2	175	55.4	262	33.4	120	41.1
Q Fever*	1	0.2	1	0.1	1	0.1	1	0.3	2	0.3	1	0.3
Rubella*	6	1.2	12	1.5	9	1.3	2	0.6	8	1.0	2	0.7
Total Salmonella*	106	21.5	145	18.7	154	22.5	47	14.9	172	21.9	57	19.5
Salmonella bovis morbificans infections*	5	1.0	3	0.4	3	0.4	3	0.9	7	0.9	3	1.0
Salmonella typhimurium infections*	51	10.4	69	8.9	87	12.7	19	6.0	102	13.0	18	6.2
Salmonella infections (NOS)*	50	10.2	73	9.4	64	9.3	25	7.9	63	8.0	36	12.3
Total Syphilis	80	16.2	27	3.5	59	8.6	8	2.5	101	12.9	9	3.1
Syphilis - <1 year duration*	9	1.8	6	0.8	4	0.6	1	0.3	3	0.4	3	1.0
Syphilis - >1 year duration*	42	8.5	11	1.4	14	2.0	3	0.9	10	1.3	4	1.4
Syphilis congenital	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Syphilis (NOS)*	29	5.9	10	1.3	41	6.0	4	1.3	88	11.2	2	0.7
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tuberculosis	72	14.6	55	7.1	80	11.7	14	4.4	85	10.8	2	0.7
Typhoid*	1	0.2	7	0.9	8	1.2	0	0.0	7	0.9	0	0.0
Verotoxin - producing <i>E. coli</i> infections*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

\* Laboratory-confirmed cases only      NOS = Not Otherwise Specified

Area health service population estimates 2000: CSA = Central Sydney Area (492 554); NSA = North Sydney Area (775 844); WSA = Western Sydney Area (685 350); WEN = Wentworth Area (316 064); SWS = South Western Sydney (785 124); CCA = Central Coast Area (292 303)

TABLE 2

DISEASE NOTIFICATIONS BY PUBLIC HEALTH UNIT AREA, NSW, 2000 *continued*

Conditions	Health Area of residence											
	HUN		ILL		SES		NRA		MNC		NEA	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
AIDS	5	0.9	3	0.9	31	4.0	6	2.3	0	0.0	0	0.0
Adverse event after immunisation	3	0.6	2	0.6	5	0.6	2	0.8	0	0.0	2	1.1
Total Arboviral*	132	24.5	28	8.1	14	1.8	82	31.2	228	87.3	83	47.5
Barmah Forest virus infections*	12	2.2	15	4.3	3	0.4	40	15.2	88	33.7	4	2.3
Ross River virus infections*	119	22.1	13	3.7	9	1.2	39	14.8	140	53.6	79	45.2
NOS*	1	0.2	0	0.0	2	0.3	3	1.1	0	0.0	0	0.0
Blood lead level >= 15ug/dl*	441	81.9	18	5.2	36	4.7	11	4.2	7	2.7	4	2.3
Brucellosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chlamydia trachomatis infections*	311	57.7	155	44.6	783	101.7	158	60.1	144	55.1	137	78.4
Cryptosporidiosis*	8	1.5	4	1.2	12	1.6	26	9.9	11	4.2	23	13.2
Food-borne illness (NOS)	2	0.4	0	0.0	55	7.1	0	0.0	2	0.8	0	0.0
Gastroenteritis (institutional)	227	42.1	8	2.3	59	7.7	0	0.0	0	0.0	23	13.2
Giardiasis*	62	11.5	26	7.5	140	18.2	136	51.8	32	12.2	40	22.9
Gonorrhoea*	17	3.2	13	3.7	463	60.1	24	9.1	10	3.8	23	13.2
Total H.influenzae type b	1	0.2	0	0.0	1	0.1	0	0.0	1	0.4	1	0.6
H.influenzae type b epiglottitis*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0
H.influenzae type b meningitis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
H.influenzae type b septicaemia*	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6
H.influenzae type b infection (NOS)*	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
HIV infection*	8	1.5	12	3.5	147	19.1	9	3.4	1	0.4	2	1.1
Haemolytic uraemic syndrome	2	0.4	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A*	7	1.3	3	0.9	29	3.8	1	0.4	4	1.5	3	1.7
Hepatitis B: acute viral*	9	1.7	4	1.2	23	3.0	8	3.0	2	0.8	4	2.3
Hepatitis B: other*	63	11.7	71	20.4	516	67.0	21	8.0	16	6.1	39	22.3
Hepatitis C: acute viral*	36	6.7	8	2.3	4	0.5	6	2.3	4	1.5	4	2.3
Hepatitis C: other*	524	97.3	262	75.4	986	128.0	383	145.8	291	111.4	128	73.3
Hepatitis D*	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	1	0.6
Hepatitis E*	0	0.0	0	0.0	2	0.3	0	0.0	0	0.0	0	0.0
Total Legionnaires'	2	0.4	6	1.7	4	0.5	0	0.0	1	0.4	0	0.0
L.longbeachae*	0	0.0	1	0.3	1	0.1	0	0.0	0	0.0	0	0.0
L.pneumophila*	0	0.0	4	1.2	3	0.4	0	0.0	1	0.4	0	0.0
other	2	0.4	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0
Leprosy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis*	9	1.7	0	0.0	0	0.0	13	4.9	5	1.9	16	9.2
Listeriosis*	2	0.4	0	0.0	5	0.6	1	0.4	0	0.0	0	0.0
Malaria*	12	2.2	7	2.0	33	4.3	7	2.7	9	3.4	8	4.6
Total Measles	0	0.0	0	0.0	6	0.8	1	0.4	1	0.4	1	0.6
Measles : Laboratory confirmed cases*	0	0.0	0	0.0	6	0.8	0	0.0	0	0.0	0	0.0
Measles : other	0	0.0	0	0.0	0	0.0	1	0.4	1	0.4	1	0.6
Total Meningococcal	13	2.4	26	7.5	37	4.8	6	2.3	5	1.9	4	2.3
Meningitis	9	1.7	12	3.5	13	1.7	2	0.8	4	1.5	2	1.1
Septicaemia	4	0.7	6	1.7	2	0.3	3	1.1	0	0.0	2	1.1
NOS	0	0.0	8	2.3	22	2.9	1	0.4	1	0.4	0	0.0
Mumps*	0	0.0	2	0.6	16	2.1	0	0.0	2	0.8	0	0.0
Mycobacterial infection: other than TB*	26	4.8	12	3.5	31	4.0	10	3.8	25	9.6	5	2.9
Paratyphoid*	0	0.0	0	0.0	3	0.4	1	0.4	0	0.0	0	0.0
Pertussis	1043	193.6	100	28.8	264	34.3	82	31.2	100	38.3	138	79.0
Q Fever*	6	1.1	3	0.9	0	0.0	37	14.1	20	7.7	9	5.2
Rubella*	84	15.6	10	2.9	38	4.9	3	1.1	7	2.7	3	1.7
Total Salmonella*	85	15.8	55	15.8	157	20.4	148	56.3	61	23.3	47	26.9
Salmonella bovis morbificans infections*	3	0.6	2	0.6	3	0.4	0	0.0	1	0.4	0	0.0
Salmonella typhimurium infections*	38	7.1	35	10.1	80	10.4	50	19.0	36	13.8	21	12.0
Salmonella infections (NOS)*	44	8.2	18	5.2	74	9.6	98	37.3	24	9.2	26	14.9
Total Syphilis	8	1.5	1	0.3	145	18.8	26	9.9	14	5.4	13	7.4
Syphilis - <1 year duration*	2	0.4	0	0.0	12	1.6	5	1.9	5	1.9	10	5.7
Syphilis - >1 year duration*	6	1.1	0	0.0	28	3.6	8	3.0	9	3.4	2	1.1
Syphilis congenital	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Syphilis (NOS)*	0	0.0	1	0.3	104	13.5	13	4.9	0	0.0	1	0.6
Tetanus	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	0	0.0
Tuberculosis	11	2.0	8	2.3	86	11.2	3	1.1	12	4.6	4	2.3
Typhoid*	0	0.0	0	0.0	2	0.3	0	0.0	0	0.0	1	0.6
Verotoxin - producing E. coli infections*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

\* lab-confirmed cases only      NOS = Not Otherwise Specified

Area health service population estimates 2000: HUN = Hunter Area (538 678); ILL = Illawarra Area (347 404); SES= South Eastern Sydney (770 097); NRA = Northern Rivers Area (262 774); MNC = Mid North Coast Area (261 316); NEA = New England Area (174 650)

TABLE 2

DISEASE NOTIFICATIONS BY PUBLIC HEALTH UNIT AREA, NSW, 2000 *continued*

Conditions	Health Area of residence												
	MAC		MWA		FWA		GMA		SA		NOS	TOTAL	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	No.	Rate
AIDS	0	0.0	0	0.0	0	0.0	1	0.4	2	1.1	0	102	1.6
Adverse event after immunisation	1	1.0	0	0.0	2	4.1	4	1.6	1	0.5	0	40	0.6
Total Arboviral*	69	66.7	42	25.1	69	142.3	121	46.9	26	14.1	0	964	14.9
Barmah Forest virus infections*	3	2.9	2	1.2	3	6.2	4	1.6	10	5.4	0	189	2.9
Ross River virus infections*	66	63.8	40	23.9	64	132.0	114	44.2	16	8.7	0	745	11.5
NOS*	0	0.0	0	0.0	2	4.1	3	1.2	0	0.0	0	30	0.5
Blood lead level >= 15ug/dl*	12	11.6	1	0.6	112	231.0	6	2.3	5	2.7	4	990	15.3
Brucellosis*	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1	0.0
Chlamydia trachomatis infections*	48	46.4	74	44.2	66	136.1	103	39.9	63	34.2	7	3464	53.6
Cryptosporidiosis*	7	6.8	1	0.6	1	2.1	12	4.7	9	4.9	0	132	2.0
Food-borne illness (NOS)	19	18.4	0	0.0	0	0.0	0	0.0	0	0.0	0	125	1.9
Gastroenteritis (institutional)	0	0.0	62	37.1	0	0.0	0	0.0	0	0.0	0	640	9.9
Giardiasis*	35	33.8	21	12.6	5	10.3	24	9.3	12	6.5	1	968	15.0
Gonorrhoea*	4	3.9	11	6.6	9	18.6	1	0.4	4	2.2	3	1048	16.2
Total H.influenzae type b	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	0	8	0.1
H.influenzae type b epiglottitis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2	0.0
H.influenzae type b meningitis*	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	0	1	0.0
H.influenzae type b septicaemia*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	4	0.1
H.influenzae type b infection (NOS)*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1	0.0
HIV infection*	1	1.0	5	3.0	0	0.0	2	0.8	1	0.5	11	367	5.7
Haemolytic uraemic syndrome	0	0.0	2	1.2	1	2.1	0	0.0	0	0.0	0	9	0.1
Hepatitis A*	2	1.9	13	7.8	1	2.1	1	0.4	2	1.1	0	195	3.0
Hepatitis B: acute viral*	1	1.0	1	0.6	0	0.0	4	1.6	1	0.5	0	94	1.5
Hepatitis B: other*	9	8.7	16	9.6	48	99.0	30	11.6	32	17.4	14	3914	60.6
Hepatitis C: acute viral*	1	1.0	9	5.4	0	0.0	3	1.2	0	0.0	0	138	2.1
Hepatitis C: other*	68	65.7	278	166.2	45	92.8	195	75.6	191	103.8	28	7375	114.1
Hepatitis D*	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	10	0.2
Hepatitis E*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	9	0.1
Total Legionnaires'	1	1.0	4	2.4	0	0.0	1	0.4	2	1.1	0	41	0.6
L.longbeachae*	0	0.0	3	1.8	0	0.0	1	0.4	1	0.5	0	12	0.2
L.pneumophila*	1	1.0	1	0.6	0	0.0	0	0.0	1	0.5	0	26	0.4
other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	3	0.0
Leprosy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2	0.0
Leptospirosis*	1	1.0	3	1.8	0	0.0	2	0.8	1	0.5	0	53	0.8
Listeriosis*	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	18	0.3
Malaria*	0	0.0	4	2.4	1	2.1	4	1.6	5	2.7	0	226	3.5
Total Measles	2	1.9	0	0.0	1	2.1	0	0.0	0	0.0	0	32	0.5
Laboratory confirmed cases*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	20	0.3
other	2	1.9	0	0.0	1	2.1	0	0.0	0	0.0	0	12	0.2
Total Meningococcal	7	6.8	6	3.6	2	4.1	9	3.5	5	2.7	1	248	3.8
Meningitis	2	1.9	2	1.2	1	2.1	3	1.2	0	0.0	1	105	1.6
Septicaemia	1	1.0	3	1.8	1	2.1	5	1.9	3	1.6	0	78	1.2
NOS	4	3.9	1	0.6	0	0.0	1	0.4	2	1.1	0	65	1.0
Mumps*	1	1.0	0	0.0	1	2.1	1	0.4	0	0.0	1	92	1.4
Mycobacterial infection: other than TB*	1	1.0	10	6.0	0	0.0	16	6.2	4	2.2	0	312	4.8
Paratyphoid*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	13	0.2
Pertussis	108	104.3	234	139.9	2	4.1	199	77.1	111	60.3	0	3682	57.0
Q Fever*	21	20.3	12	7.2	8	16.5	1	0.4	4	2.2	0	128	2.0
Rubella*	0	0.0	1	0.6	0	0.0	2	0.8	3	1.6	0	190	2.9
Total Salmonella*	22	21.3	29	17.3	6	12.4	64	24.8	29	15.8	3	1387	21.5
Salmonella bovis moribicans infections*	0	0.0	2	1.2	0	0.0	2	0.8	1	0.5	1	39	0.6
Salmonella typhimurium infections*	13	12.6	9	5.4	0	0.0	41	15.9	19	10.3	0	688	10.6
Salmonella infections (NOS)*	9	8.7	18	10.8	6	12.4	21	8.1	9	4.9	2	660	10.2
Total Syphilis	9	8.7	15	9.0	14	28.9	3	1.2	1	0.5	2	535	8.3
Syphilis - <1 year duration*	4	3.9	1	0.6	11	22.7	0	0.0	0	0.0	0	76	1.2
Syphilis - >1 year duration*	1	1.0	9	5.4	3	6.2	3	1.2	1	0.5	0	154	2.4
Syphilis congenital	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1	0.0
Syphilis (NOS)*	4	3.9	5	3.0	0	0.0	0	0.0	0	0.0	2	304	4.7
Tetanus	0	0.0	0	0.0	1	2.1	0	0.0	0	0.0	0	2	0.0
Tuberculosis	2	1.9	3	1.8	2	4.1	0	0.0	0	0.0	0	439	6.8
Typhoid*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	26	0.4
Verotoxin - producing <i>E. coli</i> infections*	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	0	1	0.0

\* lab-confirmed cases only      NOS = Not Otherwise Specified

Area health service population estimates 2000: MAC = Macquarie Area (103 506); MWA = Mid Western Area (167 262)      FWA = Far West Area (48 478); GMA = Greater Murray Area (257 940); SA = Southern Area (184 082); TOTAL = Total population in NSW (6 463 426)

TABLE 3

## DISEASE NOTIFICATIONS, BY AGE AND SEX, NSW, 2000

0-4 yrs Conditions	5-24 yrs		25-44 yrs		45-64 yrs		>=65 yrs		Total		M	F	U/T
	M	F	M	F	M	F	M	F	M	F			
AIDS	0	0	0	1	59	11	25	2	4	0	88	14	0
Adverse event after immunisation	17	11	0	4	0	2	1	2	1	1	19	20	1
Total Arboviral*	1	1	71	56	236	188	183	140	52	35	543	420	1
Barmah Forest virus infections*	1	0	10	4	36	30	47	30	15	15	109	79	1
Ross River virus infections*	0	1	58	51	190	155	128	107	35	20	411	334	0
NOS*	0	0	3	1	10	3	8	3	2	0	23	7	0
Blood lead level >= 15ug/dl (a)*	37	20	124	8	511	14	238	12	24	0	934	54	2
Brucellosis*	0	0	0	0	0	0	1	0	0	0	1	0	0
Chlamydia trachomatis infections* (a)	13	12	480	1176	974	619	110	48	10	3	1590	1860	14
Cryptosporidiosis*	48	19	13	16	16	9	8	2	0	1	85	47	0
Food-borne illness (NOS)	5	0	15	16	31	25	15	12	2	4	68	57	0
Gastroenteritis (institutional)	67	56	9	27	14	65	10	63	67	260	167	473	0
Giardiasis*	168	116	109	87	173	142	78	59	14	22	542	426	0
Gonorrhoea*	1	1	161	42	691	37	101	5	8	1	962	86	0
Total H.influenzae type b	3	1	0	0	0	1	1	0	0	2	4	4	0
H.influenzae type b epiglottitis*	0	0	0	0	0	1	0	0	0	1	0	2	0
H.influenzae type b meningitis*	1	0	0	0	0	0	0	0	0	0	1	0	0
H.influenzae type b septicaemia*	1	1	0	0	0	0	1	0	0	1	2	2	0
H.influenzae type b infection (NOS)*	1	0	0	0	0	0	0	0	0	0	1	0	0
HIV infection*	1	1	23	6	223	20	64	2	5	0	325	30	12
Haemolytic uraemic syndrome	3	0	0	2	1	0	0	1	1	1	5	4	0
Hepatitis A*	6	0	39	29	67	18	16	10	5	5	133	62	0
Hepatitis B: acute viral*	0	0	20	25	26	10	9	1	3	0	58	36	0
Hepatitis B: other*	10	11	349	334	1211	997	520	294	86	81	2176	1717	21
Hepatitis C: acute viral*	0	0	27	33	46	24	5	3	0	0	78	60	0
Hepatitis C: other*	29	14	898	585	3059	1505	712	314	125	110	4824	2529	22
Hepatitis D*	0	0	1	1	5	2	1	0	0	0	7	3	0
Hepatitis E*	0	0	4	3	0	2	0	0	0	0	4	5	0
Total Legionnaires'	0	1	1	0	2	2	15	3	13	4	31	10	0
L.longbeachae*	0	0	0	0	0	0	6	2	4	0	10	2	0
L.pneumophila*	0	0	1	0	2	1	9	1	9	3	21	5	0
other	0	1	0	0	0	1	0	0	0	1	0	3	0
Leprosy	0	0	0	0	1	1	0	0	0	0	1	1	0
Leptospirosis*	0	0	6	3	19	4	16	2	3	0	44	9	0
Listeriosis*	0	1	0	0	0	0	4	1	6	6	10	8	0
Malaria*	1	4	54	11	96	27	21	6	5	1	177	49	0
Total Measles	8	6	5	10	2	1	0	0	0	0	15	17	0
Measles : Laboratory confirmed cases*	3	4	4	6	2	1	0	0	0	0	9	11	0
Measles : other	5	2	1	4	0	0	0	0	0	0	6	6	0
Total Meningococcal	39	35	72	46	20	13	7	12	0	4	138	110	0
Meningitis	13	13	34	25	3	4	3	8	0	2	53	52	0
Septicaemia	17	14	20	10	7	4	2	2	0	2	46	32	0
NOS	9	8	18	11	10	5	2	2	0	0	39	26	0
Mumps*	1	0	28	29	15	13	3	3	0	0	47	45	0
Mycobacterial infection: other than TB*	7	6	5	4	42	19	49	34	71	75	174	138	0
Paratyphoid*	0	0	3	2	4	1	1	2	0	0	8	5	0
Pertussis	128	154	856	883	318	535	259	370	82	97	1643	2039	0
Q Fever*	2	0	21	4	36	16	31	11	5	2	95	33	0
Rubella*	2	2	112	20	34	12	3	3	2	0	153	37	0
Total Salmonella*	223	217	213	195	145	158	61	72	45	52	687	694	6
Bovis morbilicans infections*	9	8	6	3	3	5	2	1	1	1	21	18	0
Typhimurium infections*	118	110	126	119	58	67	18	26	18	25	338	347	3
NOS*	96	99	81	73	84	86	41	45	26	26	328	329	3
Total Syphilis	1	1	19	42	113	120	124	23	55	35	313	221	1
Syphilis - <1 year duration*	0	0	5	15	24	18	10	2	1	1	40	36	0
Syphilis - >1 year duration*	1	0	9	9	30	43	27	8	17	10	84	70	0
Syphilis congenital	0	1	0	0	0	0	0	0	0	0	0	1	0
Syphilis (NOS)*	0	0	5	18	59	59	87	13	37	24	189	114	1
Tetanus	0	0	0	0	0	0	0	0	0	2	0	2	0
Tuberculosis	5	9	20	31	83	86	56	48	55	46	219	220	0
Typhoid*	1	1	9	6	4	3	1	1	0	0	15	11	0
Verotoxin - producing <i>E. coli</i> infections*	0	1	0	0	0	0	0	0	0	0	0	1	0

\* Laboratory-confirmed cases only      NOS = Not Otherwise Specified

(a) = (1+1) trans sexual case

TABLE 4

## DISEASE NOTIFICATIONS BY MONTH OF ONSET, NSW, 2000

Conditions	Months of Onset												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
AIDS	15	9	9	9	10	8	6	6	5	6	8	11	102
Adverse event after immunisation	0	1	4	4	1	1	3	7	6	3	6	4	40
Total Arboviral*	64	113	132	185	204	67	32	26	26	30	45	40	964
Barmah Forest virus infections*	16	25	17	15	30	14	8	11	17	10	17	9	189
Ross River virus infections*	42	83	110	162	174	51	24	14	8	20	28	29	745
NOS*	6	5	5	8	0	2	0	1	1	0	0	2	30
Blood lead level >=15ug/dl*	77	79	174	79	92	109	60	49	54	84	79	54	990
Brucellosis*	0	0	1	0	0	0	0	0	0	0	0	0	1
Chlamydia trachomatis infections*	207	211	254	213	222	283	287	383	283	378	415	328	3464
Cryptosporidiosis*	12	14	17	13	7	7	10	3	8	14	18	9	132
Food-borne illness(NOS)	4	29	2	0	31	0	34	0	0	9	5	11	125
Gastroenteritis (institutional)	26	4	0	0	31	12	108	144	122	80	43	70	640
Giardiasis*	76	105	113	84	92	80	53	77	52	78	84	74	968
Gonorrhoea*	103	95	111	83	98	84	77	68	93	76	85	75	1048
Total H.influenzae*	1	0	0	0	0	1	1	2	1	0	1	1	8
H.influenzae type b epiglottitis*	0	0	0	0	0	1	0	1	0	0	0	0	2
H.influenzae type b meningitis*	1	0	0	0	0	0	0	0	0	0	0	0	1
H.influenzae type b septicaemia*	0	0	0	0	0	0	1	1	1	0	0	1	4
H.influenzae type b infection (NOS)*	0	0	0	0	0	0	0	0	0	0	1	0	1
HIV infection*	40	22	36	21	33	36	29	39	31	22	32	26	367
Haemolytic uraemic syndrome	1	1	1	1	0	0	0	0	1	0	2	2	9
Hepatitis A*	29	16	19	16	13	18	20	11	17	13	15	8	195
Hepatitis B: acute viral*	11	6	5	5	7	8	8	15	10	8	8	3	94
Hepatitis B: other*	343	328	382	254	266	314	335	368	310	373	367	274	3914
Hepatitis C: acute viral*	5	15	9	6	11	9	16	8	13	17	17	12	138
Hepatitis C: other*	670	781	826	552	540	540	529	583	495	599	735	525	7375
Hepatitis D*	0	0	1	1	0	2	0	5	0	0	0	1	10
Hepatitis E*	0	2	3	1	1	0	0	0	0	1	0	1	9
Total Legionnaires'	2	0	5	8	5	3	2	5	1	2	6	2	41
L. longbeachae*	0	0	0	1	2	0	2	2	0	1	2	2	12
L. pneumophila*	2	0	4	7	2	3	0	3	0	1	4	0	26
NOS	0	0	1	0	1	0	0	0	1	0	0	0	3
Leprosy	0	0	0	0	1	0	0	0	0	0	1	0	2
Leptospirosis*	2	1	5	3	11	5	3	0	2	10	7	4	53
Listeriosis*	2	2	1	0	1	1	0	1	1	1	2	6	18
Malaria*	23	16	18	21	28	19	30	18	17	15	8	13	226
Total Measles	2	1	1	4	0	0	1	1	4	5	8	5	32
Measles : Laboratory confirmed cases*	1	0	0	1	0	0	1	1	3	3	5	5	20
Measles : other	1	1	1	3	0	0	0	0	1	2	3	0	12
Total Meningococcal	19	10	11	15	14	29	27	29	33	20	20	21	248
Meningitis	11	6	4	8	6	14	8	16	12	6	7	7	105
Septicaemia	7	3	4	7	4	8	4	6	13	8	10	4	78
NOS	1	1	3	0	4	7	15	7	8	6	3	10	65
Mumps*	2	2	8	11	19	10	7	13	7	7	4	2	92
Mycobacterial infection: other than TB*	20	36	30	37	37	40	30	25	28	9	13	7	312
Paratyphoid*	2	0	2	1	2	1	2	2	0	0	0	1	13
Pertussis	155	120	116	152	201	333	470	473	501	416	398	347	3682
Q Fever*	12	6	11	7	7	9	9	20	15	11	11	10	128
Rubella*	4	7	6	2	5	5	11	23	17	55	36	19	190
Total Salmonella*	145	119	150	126	164	75	44	68	61	95	145	195	1387
Salmonella bovis morbificans infections*	4	1	4	5	2	2	3	4	1	2	6	5	39
Salmonella typhimurium infections*	76	48	75	70	90	38	24	25	31	36	61	114	688
Salmonella infections (NOS)*	65	70	71	51	72	35	17	39	29	57	78	76	660
Total Syphilis	41	41	42	32	47	42	50	48	45	43	62	42	535
Syphilis - <1 year duration*	7	10	6	6	7	4	10	5	7	4	9	1	76
Syphilis - >1 year duration*	9	11	15	9	19	14	13	14	12	13	13	12	154
Syphilis congenital	0	0	0	0	1	0	0	0	0	0	0	0	1
Syphilis (NOS)*	25	20	21	17	20	24	27	29	26	26	40	29	304
Tetanus	0	0	1	0	0	0	0	0	0	0	0	1	2
Tuberculosis	37	43	32	23	32	37	34	35	41	39	43	43	439
Typhoid*	4	1	3	5	1	1	5	2	2	0	1	1	26
Verotoxin - producing <i>E. coli</i> infections*	0	0	0	0	0	0	1	0	0	0	0	0	1

\* Laboratory-confirmed cases only    NOS = Not Otherwise Specified