Communicable Diseases Surveillance

Presentation of NNDSS data

In the March 2000 issue an additional summary table was introduced. Table 1 presents 'date of notification' data, which is a composite of three components: (i) the true onset date from a clinician, if available, (ii) the date the laboratory test was ordered, or (iii) the date reported to the public health unit. Table 2 presents the crude incidence of diseases by State or Territory for the current reporting month. Table 3 presents data by report date for information only. In Table 3 the report date is the date the public health unit received the report.

Table 1 now includes the following summary columns: total current month 2000 data; the totals for previous month 2000 and corresponding month 1999; a 5-year mean which is calculated using previous, corresponding and following month data for the previous 5 years (*Morb Mortal Wkly Rep*, 2000:49;139-146); year to date (YTD) figures; the mean for the year to date figures for the previous 5 years; and the ratio of the current month to the mean of the last 5 years.

Highlights for September, 2000

Communicable Disease Surveillance Highlights report on data from various sources, including the National Notifiable Diseases Surveillance System (NNDSS) and several disease specific surveillance systems that provide regular reports to Communicable Diseases Intelligence*. These national data collections are complemented by intelligence provided by State and Territory communicable disease epidemiologists and/or data managers who have recently formed a Data Management Network. This additional information has enabled the reporting of more informative highlights each month.*

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand and the CDI *Virology and Serology Laboratory Reporting Scheme (LabVISE) is a sentinel surveillance scheme. In this report, data from the NNDSS are referred to as 'notifications' or 'cases', whereas those from ASPREN are referred to as 'consultations' or 'encounters' while data from the LabVISE scheme are referred to as 'laboratory reports'.*

Three types of data are included in National Influenza Surveillance, 2000. These are sentinel general practitioner surveillance conducted by the Australian Sentinel Practice Research Network (ASPREN), the Department of Human Services (Victoria), the Department of Health (New South Wales) and the Tropical Influenza Surveillance Scheme, Territory Health Services (Northern Territory); laboratory surveillance data from the Communicable Diseases Intelligence *Virology and Serology Laboratory Reporting Scheme (LabVISE); and the World Health Organization Collaborating Centre for Influenza Reference and Research; and absenteeism surveillance conducted by Australia Post. Data from ASPREN are referred to as 'consultations' or 'encounters'. For further information about these schemes, see* Commun Dis Intell *2000;24:9-10.*

In September 2000 the number of reports of incident hepatitis B (ratio 1.5), chlamydial infection (ratio1.5), mumps (ratio 1.3) legionellosis (ratio 1.2) and meningococcal infection (ratio 1.5) has increased compared with their 5 year-mean (Figure 9, Table 1).

Gastrointestinal infections

There were 1,334 notifications of gastrointestinal infections. All diseases had fewer reporting numbers this month than for the 5-year mean with the exception of Shiga-like toxin producing *Escherichia coli* (SLTEC/VTEC) which has only recently become notifiable and is still not notifiable in Queensland or Western Australia.

There were six cases of SLTEC/VTEC infection all in South Australia. One was in a one-year old child where the family had purchased beef in bulk from a local abattoir, and one was in a 90-year old resident of an aged care facility where no apparent source for the infection was identified.

Vaccine preventable diseases

All vaccine preventable diseases except mumps had fewer reports this month than for the 5-year mean. The increase in the notification rate (1.2/100,000 population) for mumps was again due to an increase in Western Australia (3.9/100,000 population).

Although less than for the previous month, the pertussis notification rate of 26.1/100,000 population increased due to an increase in the Australian Capital Territory (61.7/100,000 population), New South Wales (53.7/100,000 population) and South Australia (26.9/100,000 population) (Figure 1). With this current increase in notifications, compared with previous increases in 1994/1995 (up to 130/100,000 population) and 1997/1998 (up to 250/100,000 population), less disease is presenting in children under the age of 10 years (18 per cent of cases this month; 33.6/100,000 population) (Figure 2).

Measles cases continue to be at their lowest level since the national notification system began (Figure 3). Of the 8 cases for September 2000, 5 were reported in New South Wales (all female: 2 were under one year of age, 2 were one-year old, and one was 23 years of age). Two were reported in the Australian Capital Territory (both males aged 29 and 38 years) and one was reported in South Australia (a 25-year old male).

Figure 1. Notification rate of pertussis, Australian Capital Territory, New South Wales, South Australia and Australia, 1 October 1999 to 30 September 2000

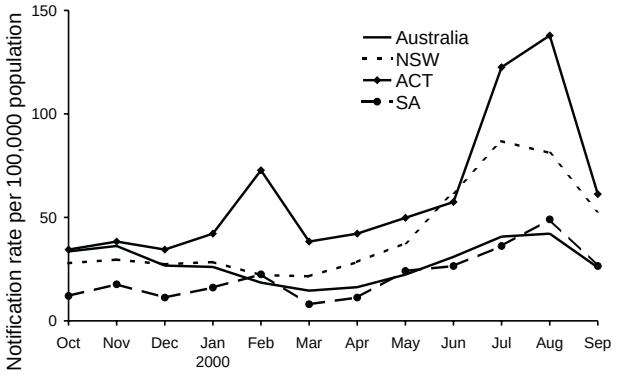


Figure 2. Notification rate of pertussis, Australia, 1 January 1991 to 30 September 2000, by all age groups and under 10 years of age

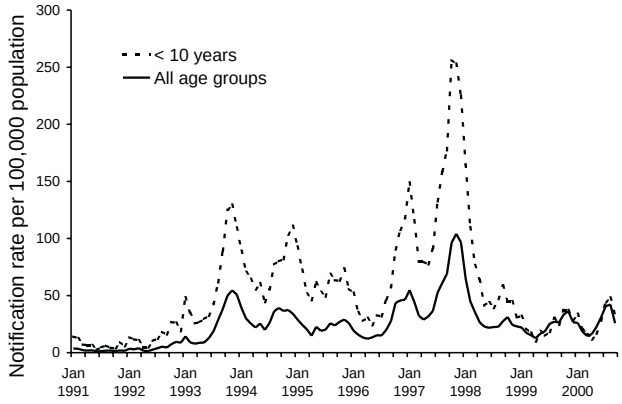
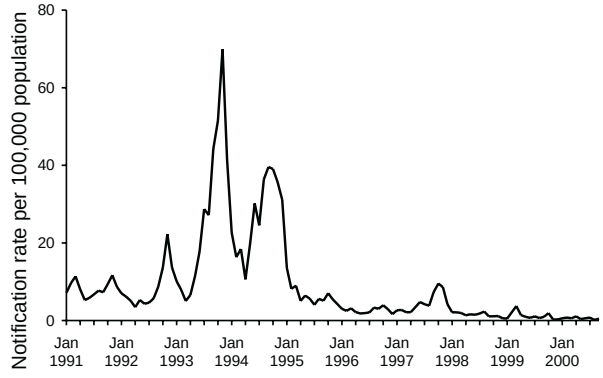


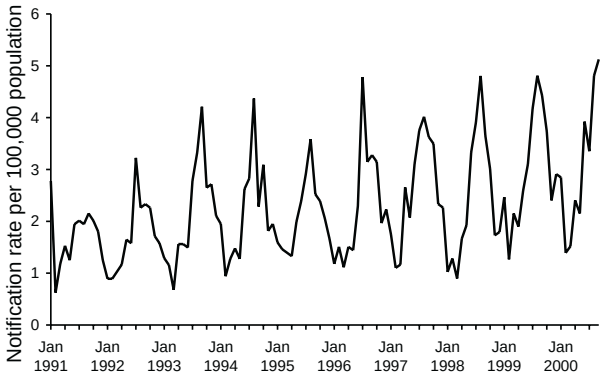
Figure 3. Notification rate of measles, Australia, 1 January 1991 to 30 September 2000



Meningococcal infections

There were 81 notifications of meningococcal infection in September 2000 (a notification rate of 5.2/100,000 population (Figure 4). Of these cases, 31 per cent were under 5 years of age and 32 per cent were in the 15-24 year age range. The serogroups were available for 51 cases; these were serogroups B, C, Y and W (41%, 55%, 2% and 2% respectively). There were also several deaths caused by meningococcal infections.

Figure 4. Notification rate of meningococcal infection, Australia, 1 January 1991



Legionellosis

There were 17 notifications of legionellosis in September 2000. The increase in the notification rate (1.1/100,000 population) was due to an increase in South Australia (6.5/100,000 population). Of these South Australian cases, 5 were caused by *Legionella longbeachae*. Two cases have been confirmed serologically. There was one male aged 64 and one female aged 43 years. In one case exposure to gardening and manure occurred prior to the onset of illness and in the second case no environmental exposures were identified. Three presumptive cases are awaiting further serology.

Influenza

Ten participating laboratories submitted 455 laboratory reports of influenza in September 2000, a substantial increase from 107 in August 2000, and an increase from 352 in September 1999 (Figure 5). Of the laboratory reports received in September 2000 (weeks 36-39), 285 were influenza A and 131 influenza B (Figure 6). The weekly proportion of influenza B among the total laboratory reports varied from 28 to 36 per cent in September 2000 which was higher than the same period last year (14% to 19%).

After peaking at the end of August, all of the influenza surveillance schemes reported a decline in the number of influenza-like illness consultation. The New South Wales Influenza Surveillance Scheme has reported the highest rate during the year 2000 influenza surveillance season (37 per 1,000 consultations in week 37 ending 17 September) (Figure 7).

Figure 5. Laboratory reports of influenza, Australia, 1999 to 2000, by month of specimen collection

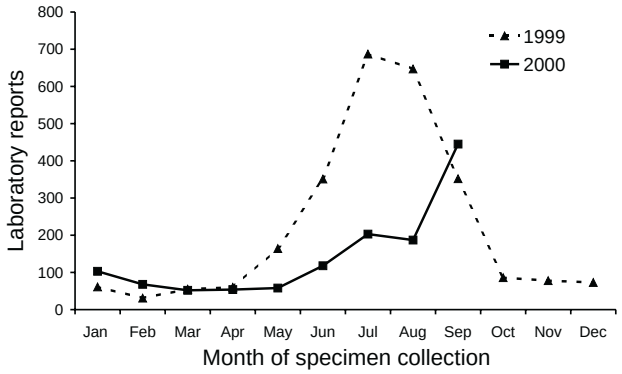


Figure 6. Laboratory reports of influenza, Australia, week 40 1999 to week 39 2000, by week of specimen collection

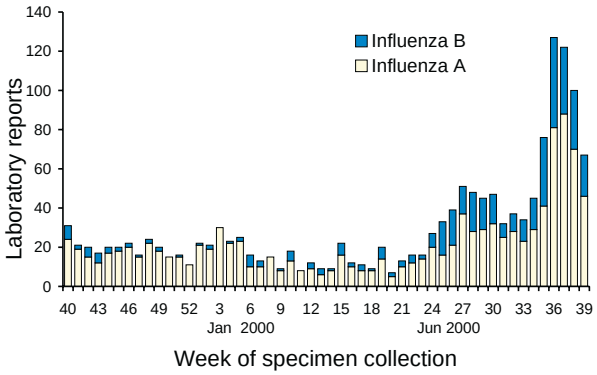
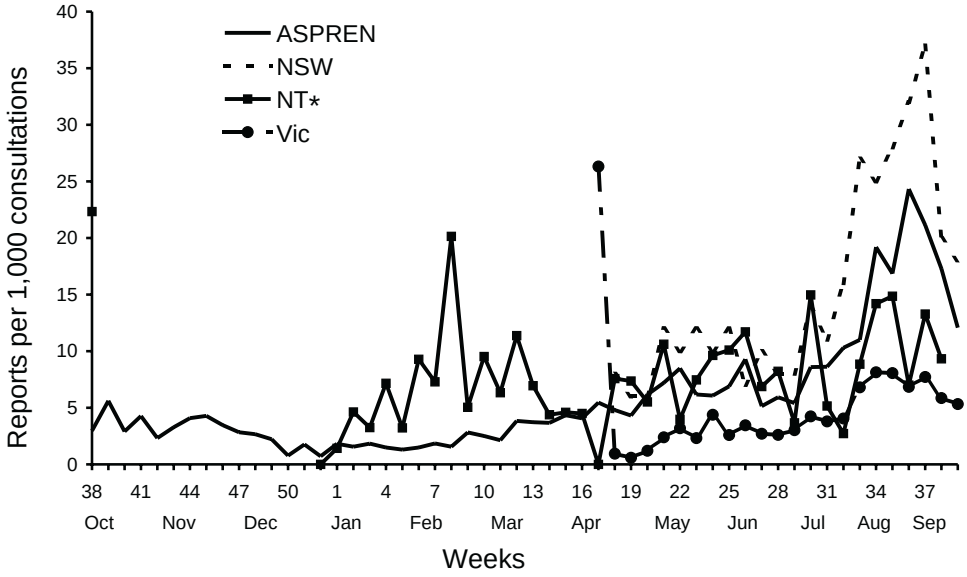


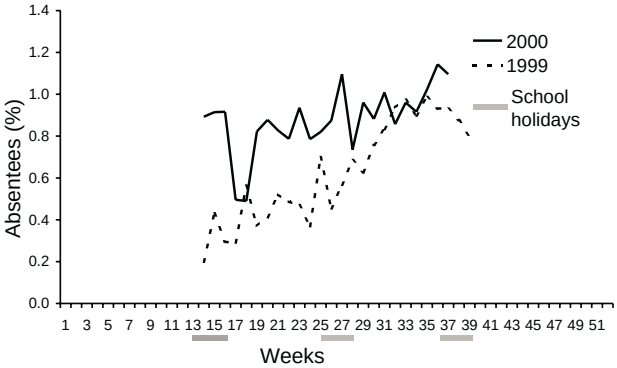
Figure 7. Sentinel general practitioner influenza consultations rates, week 38 1999 to week 39 2000, by surveillance scheme



* Data for week 39 not supplied

The percentage of Australia Post employees absent for three or more consecutive days in the first half of September 2000 (weeks 36 and 37 only) was the highest rate for the entire surveillance period in 2000, and was higher than the same period in 1999 (Figure 8). The first two distinctive peaks for absenteeism (weeks 15/16 and weeks 26/27) coincided with school holiday periods in most States. The rate in week 35 (ending 6 September) was the highest for the entire surveillance period in 2000 (1.1%) but this peak preceded the school holiday and Olympic Games period (weeks 37-39).

Figure 8. Absenteeism rates in Australia Post, week 14 to week 39 1999 and week 14 to week 37 2000



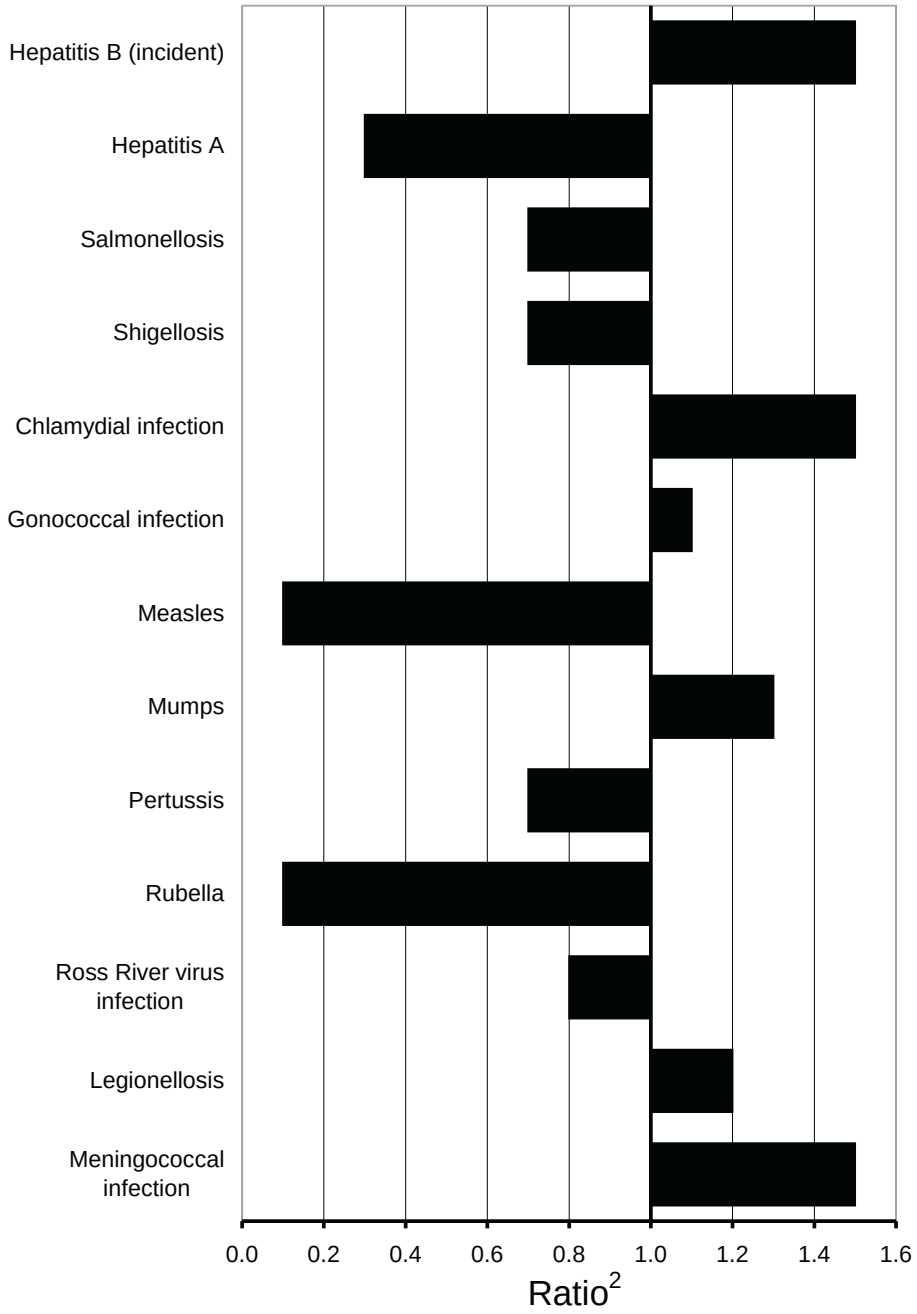
Tables

There were 7,149 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification date in September 2000 (Table 1). The crude incidence of diseases per 100,000 population for each State or Territory (Table 2) was included for the first time in the August issue of *Commun Dis Intell*. Data by date of report for September 2000, are included in this issue of *Commun Dis Intell* (Table 3). Figure 9 illustrates, for selected diseases, the September 2000 totals as ratios to the mean of their August to October levels for the previous 5 years (1995 to 1999).

There were 1,941 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the reporting period, 1 to 30 September 2000 (Tables 4 and 5).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 35 to 38, ending 24 September 2000, are included in this issue of *Commun Dis Intell* (Table 6).

Figure 9. Selected[1] diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 to 30 September 2000 with historical data[2]



1. Selected diseases are chosen each calendar month according to current activity
2. Ratio of current month total to mean of August to October data for the previous five years

Table 1. Notifications of diseases received by State and Territory health authorities in the period 1 to 30 September 2000, by date of notification[#]

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total September 2000[1]	Total August 2000[1]	Total September 1999[1]	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Bloodborne															
Hepatitis B (incident)	0	7	0	4	4	0	8	11	34	46	25	23	311	209	1.5
Hepatitis B (unspecified)[2]	5	209	0	65	11	6	178	55	529	693	724	574	6,028	5,229	0.9
Hepatitis C (incident)	1	6	0	-	2	0	4	6	19	34	23	19	364	145	1.0
Hepatitis C (unspecified)[2]	24	459	14	298	43	29	416	139	1,422	1,743	1,718	1,346	15,823	11,929	1.1
Hepatitis D	0	0	0	0	0	0	0	0	0	5	1	2	15	13	
Gastrointestinal															
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Campylobacterosis[3]	23	-	13	200	157	52	354	183	982	1,186	1,007	1,054	9,844	8,565	0.9
Haemolytic uraemic syndrome	0	0	0	0	0	0	0	0	0	0	0	1	6	5	
Hepatitis A	2	15	3	6	1	0	4	12	43	39	129	152	668	1,711	0.3
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Listeriosis	0	1	0	0	0	0	2	0	3	3	16	6	52	50	0.5
Salmonellosis	5	47	11	69	16	3	54	58	263	320	374	401	4,633	5,098	0.7
Shigellosis[3]	0	-	12	9	2	0	7	3	33	29	43	45	366	515	0.7
SLTEC,VTEC[4]	0	0	0	NN	6	0	0	NN	6	2	0	1	29	9	6.0
Typhoid	0	0	0	0	0	0	0	0	0	7	8	4	55	58	
Yersiniosis[3]	0	-	1	3	0	0	0	0	4	8	10	16	59	178	0.3
Quarantinable															
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	1	3	
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sexually transmissible															
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Chlamydial infection[5]	19	217	70	414	127	22	223	163	1,255	1,661	1,153	831	12,950	7,385	1.5
Donovanosis	0	0	0	0	NN	0	0	0	0	0	1	4	11	35	
Gonococcal infection[6]	0	47	86	90	10	0	89	87	409	507	440	370	4,774	3,507	1.1
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Syphilis[7]	2	42	12	66	0	0	0	3	125	166	176	139	1,395	1,295	0.9

Table 1 (continued). Notifications of diseases received by State and Territory health authorities in the period 1 to 30 September 2000, by date of notification[#]

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total September 2000[1]	Total August 2000[1]	Total September 1999[1]	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Vaccine preventable															
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haemophilus influenzae type b	0	1	0	2	1	0	0	0	4	5	1	4	21	39	1.0
Measles	2	5	0	0	1	0	0	0	8	2	15	58	84	449	0.1
Mumps	0	7	0	0	0	0	5	6	18	19	16	14	173	130	1.3
Pertussis	16	283	0	22	33	2	47	5	408	666	418	580	3,751	3,814	0.7
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rubella[8]	0	10	0	2	0	0	5	0	17	35	31	228	173	1,188	0.1
Tetanus	0	0	0	1	0	0	0	0	1	0	0	0	6	4	
Vectorborne															
Arbovirus infection NEC	0	0	0	1	0	0	0	0	1	2	1	2	64	46	0.5
Barmah Forest virus infection	0	10	0	21	0	0	0	3	34	40	33	33	452	586	1.0
Dengue	0	0	0	6	0	0	0	0	6	1	4	11	203	125	0.5
Malaria	1	15	8	18	3	0	5	0	50	88	62	48	790	589	1.0
Ross River virus infection	0	7	1	48	0	0	3	4	63	60	79	78	3,683	4,456	0.8
Zoonoses															
Brucellosis	0	0	0	4	0	0	0	0	4	5	8	5	16	27	0.8
Hydatid infection	0	NN	0	3	0	0	1	0	4	2	0	5	20	30	0.8
Leptospirosis	1	2	0	3	0	0	4	0	10	11	13	13	176	147	0.8
Ornithosis	0	NN	0	NN	0	2	3	1	6	8	5	7	59	53	0.9
Q fever	0	10	0	33	1	0	0	0	44	45	55	46	385	401	1.0
Other															
Legionellosis	0	0	0	6	8	0	1	2	17	25	16	14	386	150	1.2
Leprosy	0	0	0	0	0	0	0	0	0	0	1	1	3	6	
Meningococcal infection	4	35	0	5	5	1	22	9	81	76	70	55	435	347	1.5
Tuberculosis	0	9	0	4	3	0	21	7	44	65	120	91	669	780	0.5
Total	105	1,444	231	1,403	434	117	1,456	757	5,947	7,604	6,796	6,281	68,933	59,312	

1. Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.
2. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of tests being carried out.
3. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
4. Infections with Shiga-like toxin (verotoxin) producing *E. coli* (SLTEC/VTEC).
5. WA: genital only.
6. NT, Qld, SA , Vic and WA: includes gonococcal neonatal ophthalmia.
7. Includes congenital syphilis.
8. Includes congenital rubella.

\# Date of notification = a composite of three components: (i) the true onset date from a clinician, if available, (ii) the date the laboratory test was ordered, or (iii) the date reported to the public health unit.

NN Not Notifiable.

NEC Not Elsewhere Classified.

\- Elsewhere Classified.

* Ratio = ratio of current month total to the mean of the last 5 years (where data are available) calculated as described above.

Table 2. Crude incidence of diseases by State or Territory, 1 to 30 September 2000. (Rate per 100,000 population)

Disease[1]	State or Territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Bloodborne									
Hepatitis B (incident)	0.0	1.3	0.0	1.4	3.2	0.0	2.0	7.1	2.2
Hepatitis B (unspecified)[2]	19.1	39.1	0.0	22.2	8.8	15.3	45.3	35.5	33.5
Hepatitis C (incident)	3.8	1.1	0.0	-	1.6	0.0	1.0	3.9	1.5
Hepatitis C (unspecified)[2]	91.9	85.9	87.1	101.8	34.6	74.0	105.9	89.6	90.0
Hepatitis D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gastrointestinal									
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacterosis[3]	88.1	-	80.9	68.3	126.2	132.7	90.1	118.0	93.9
Haemolytic uraemic syndrome	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hepatitis A	7.7	2.8	18.7	2.0	0.8	0.0	1.0	7.7	2.7
Hepatitis E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Listeriosis	0.0	0.2	0.0	0.0	0.0	0.0	0.5	0.0	0.2
Salmonellosis	19.1	8.8	68.4	23.6	12.9	7.7	13.8	37.4	16.6
Shigellosis[3]	0.0	-	94.7	3.1	1.6	0.0	1.8	1.9	3.2
SLTEC,VTEC[4]	0.0	0.0	0.0	NN	4.8	0.0	0.0	NN	0.5
Typhoid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yersiniosis[3]	0.0	-	6.2	1.0	0.0	0.0	0.0	0.0	0.4
Quarantinable									
Cholera	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plague	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rabies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Viral haemorrhagic fever	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow fever	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sexually transmissible									
Chancroid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlamydial infection[5]	72.8	40.6	435.5	141.4	102.1	56.1	56.8	105.1	79.4
Donovanosis	0.0	0.0	0.0	0.0	NN	0.0	0.0	0.0	0.0
Gonococcal infection[6]	0.0	8.8	535.0	30.7	8.0	0.0	22.7	56.1	25.9
Lymphogranuloma venereum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Syphilis[7]	7.7	7.9	74.7	22.5	0.0	0.0	0.0	1.9	7.9
Vaccine preventable									
Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haemophilus influenzae type b	0.0	0.2	0.0	0.7	0.8	0.0	0.0	0.0	0.3
Measles	7.7	0.9	0.0	0.0	0.8	0.0	0.0	0.0	0.5
Mumps	0.0	1.3	0.0	0.0	0.0	0.0	1.3	3.9	1.1
Pertussis	61.3	53.0	0.0	7.5	26.5	5.1	12.0	3.2	25.8
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rubella[8]	0.0	1.9	0.0	0.7	0.0	0.0	1.3	0.0	1.1
Tetanus	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Vectorborne									
Arbovirus infection NEC	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Barmah Forest virus infection	0.0	1.9	0.0	7.2	0.0	0.0	0.0	1.9	2.2
Dengue	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.4
Malaria	3.8	2.8	49.8	6.1	2.4	0.0	1.3	0.0	3.2
Ross River virus infection	0.0	1.3	6.2	16.4	0.0	0.0	0.8	2.6	4.0

Table 2 (continued). Crude incidence of diseases by State or Territory, 1 to 30 September 2000. (Rate per 100,000 population)

Disease[1]	State or Territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Zoonoses									
Brucellosis	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.3
Hydatid infection	0.0	NN	0.0	1.0	0.0	0.0	0.3	0.0	0.4
Leptospirosis	3.8	0.4	0.0	1.0	0.0	0.0	1.0	0.0	0.6
Ornithosis	0.0	NN	0.0	NN	0.0	5.1	0.8	0.6	0.8
Q fever	0.0	1.9	0.0	11.3	0.8	0.0	0.0	0.0	2.8
Other									
Legionellosis	0.0	0.0	0.0	2.0	6.4	0.0	0.3	1.3	1.1
Leprosy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meningococcal infection	15.3	6.6	0.0	1.7	4.0	2.6	5.6	5.8	5.1
Tuberculosis	0.0	1.7	0.0	1.4	2.4	0.0	5.3	4.5	2.8
Total	402.1	270.4	1437.1	479.3	348.8	298.6	370.8	488.1	376.3

1. Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.
2. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of tests being carried out.
3. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
4. Infections with Shiga-like toxin (verotoxin) producing *E. coli* (SLTEC/VTEC).
5. WA: genital only.
6. NT, Qld, SA , Vic and WA: includes gonococcal neonatal ophthalmia.
7. Includes congenital syphilis.
8. Includes congenital rubella.

NN Not Notifiable.

NEC Not Elsewhere Classified.

\- Elsewhere Classified.

Table 3. Notifications of diseases received by State and Territory health authorities in the period 1 to 30 September 2000, by date of report*

Disease[1]	State or Territory								Total this period	Year to date total
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Bloodborne										
Hepatitis B (incident)	0	11	1	3	7	0	10	11	43	318
Hepatitis B (unspecified)[2]	3	359	0	70	30	4	179	63	708	6,252
Hepatitis C (incident)	1	8	0	-	3	0	3	6	21	377
Hepatitis C (unspecified)[2]	22	724	12	283	64	34	418	159	1,716	16,087
Hepatitis D	0	2	0	0	0	0	0	0	2	15
Gastrointestinal										
Botulism	0	0	0	0	0	0	0	0	0	0
Campylobacterosis[3]	22	-	15	185	169	46	362	205	1,004	9,919
Haemolytic uraemic syndrome	0	0	0	0	0	0	0	0	0	6
Hepatitis A	2	15	6	8	1	0	4	13	49	696
Hepatitis E	0	0	0	0	0	0	0	0	0	0
Listeriosis	0	0	0	1	0	0	2	0	3	51
Salmonellosis	5	57	12	91	21	1	62	53	302	4,799
Shigellosis[3]	0	-	10	6	3	0	9	3	31	367
SLTEC,VTEC[4]	0	0	0	NN	5	0	0	NN	5	30
Typhoid	0	3	0	0	0	0	0	0	3	60
Yersiniosis[3]	0	-	1	3	0	0	0	0	4	61
Quarantinable										
Cholera	0	0	0	0	0	0	0	0	0	1
Plague	0	0	0	0	0	0	0	0	0	0
Rabies	0	0	0	0	0	0	0	0	0	0
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0
Yellow fever	0	0	0	0	0	0	0	0	0	0
Sexually transmissible										
Chancroid	0	0	0	0	0	0	0	0	0	0
Chlamydial infection[5]	15	290	104	443	149	28	294	189	1,512	12,977
Donovanosis	0	0	0	0	NN	0	0	0	0	12
Gonococcal infection[6]	0	70	133	91	24	0	92	89	499	4,831
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0
Syphilis[7]	1	54	14	81	0	0	0	9	159	1,461
Vaccine preventable										
Diphtheria	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae type b	0	2	0	3	1	0	0	0	6	23
Measles	1	4	0	0	1	0	0	0	6	84
Mumps	0	5	0	0	0	0	7	7	19	175
Pertussis	24	409	1	32	43	0	67	6	582	3,895
Poliomyelitis	0	0	0	0	0	0	0	0	0	0
Rubella[8]	0	19	0	2	1	0	11	0	33	176
Tetanus	0	0	0	0	0	0	0	0	0	6
Vectorborne										
Arbovirus infection NEC	0	0	0	1	0	0	1	0	2	65
Barmah Forest virus infection	0	11	0	21	0	0	0	5	37	466
Dengue	0	0	0	4	0	0	0	0	4	222
Malaria	1	17	6	25	3	0	6	3	61	799
Ross River virus infection	0	8	1	54	1	0	3	8	75	3,887

Table 3 (continued). Notifications of diseases received by State and Territory health authorities in the period 1 to 30 September 2000, by date of report*

Disease[1]	State or Territory								Total this period	Year to date total
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Zoonoses										
Brucellosis	0	0	0	3	0	0	0	0	3	15
Hydatid infection	0	NN	0	2	0	0	2	1	5	20
Leptospirosis	0	2	1	7	1	0	5	0	16	182
Ornithosis	0	NN	0	NN	0	0	7	1	8	65
Q fever	0	16	0	25	3	0	0	0	44	400
Other										
Legionellosis	0	1	0	8	12	0	2	3	26	391
Leprosy	0	0	0	0	0	0	0	0	0	4
Meningococcal infection	5	32	0	10	5	0	22	8	82	434
Tuberculosis	0	22	3	10	0	1	29	14	79	744
Total	102	2,141	320	1,472	547	114	1,597	856	7,149	70,373

1. Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.
2. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of tests being carried out.
3. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
4. Infections with Shiga-like toxin (verotoxin) producing *E. coli* (SLTEC/VTEC).
5. WA: genital only.
6. NT, Qld, SA , Vic and WA: includes gonococcal neonatal ophthalmia.
7. Includes congenital syphilis.
8. Includes congenital rubella.

* Date of report is the date the public health unit received the report.

NN Not Notifiable.

NEC Not Elsewhere Classified.

\- Elsewhere Classified.

Table 4. Virology and serology laboratory reports by contributing laboratories for the reporting period 1 to 30 September 2000[1]

State or Territory	Laboratory	This period	Total this period[2]
Australian Capital Territory	The Canberra Hospital	68	199
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	196	210
	New Children's Hospital, Westmead	133	151
New South Wales	Repatriation General Hospital, Concord	-	-
	Royal Prince Alfred Hospital, Camperdown	65	88
	South West Area Pathology Service, Liverpool	-	-
Queensland	Queensland Medical Laboratory, West End	12	206
	Townsville General Hospital	9	9
South Australia	Institute of Medical and Veterinary Science, Adelaide	587	678
Tasmania	Northern Tasmanian Pathology Service, Launceston	25	-
	Royal Hobart Hospital, Hobart	-	-
Victoria	Monash Medical Centre, Melbourne	-	-
	Royal Children's Hospital, Melbourne	171	208
	Victorian Infectious Diseases Reference Laboratory, Fairfield	141	159
Western Australia	PathCentre Virology, Perth	334	419
	Princess Margaret Hospital, Perth	188	157
	Western Diagnostic Pathology	12	8
Total		1,941	2,492

1. The complete list of laboratories reporting for the 12 months, January to December 2000, will appear in every report from January 2000 regardless of whether reports were received in this reporting period. Reports are not always received from all laboratories.
2. Total reports include both reports for the current period and outstanding reports to date.

\- Nil reports

Table 5. Virology and serology laboratory reports by State or Territory[1] for the reporting period 1 to 30 September 2000, and total reports for the year[2]

	State or Territory[1]								This period 2000	This period 1999	Year to date 2000[3]	Year to date 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
Measles, mumps, rubella												
Measles virus	-	-	-	-	1	-	-	-	1	16	36	151
Mumps virus	-	-	1	-	1	-	1	3	6	5	40	46
Rubella virus	-	1	-	-	1	-	-	-	2	33	28	251
Hepatitis viruses												
Hepatitis A virus	2	-	1	-	-	-	1	6	10	44	121	401
Hepatitis D virus	-	-	-	-	-	-	2*	-	2	-	6	8
Arboviruses												
Ross River virus	-	-	-	-	-	-	-	2	2	62	1,098	1,430
Barmah Forest virus	-	-	-	2	-	-	-	1	3	16	121	180
Dengue not typed	-	-	-	-	-	-	-	1	1	6	167	44
Flavivirus (unspecified)	-	-	-	-	-	-	1	-	1	2	39	25
Adenoviruses												
Adenovirus type 1	-	-	-	-	-	-	1	-	1	1	4	8
Adenovirus type 3	-	-	-	-	1	-	-	-	1	3	14	22
Adenovirus type 40	-	-	-	-	-	-	-	6	6	7	82	60
Adenovirus not typed/pending	1	12	-	-	26	1	7	25	72	81	741	814
Herpes viruses												
Cytomegalovirus	3	19	-	-	36	1	24	12	95	120	850	1,005
Varicella-zoster virus	-	11	-	2	11	1	22	39	86	196	961	1,604
Epstein-Barr virus	-	-	-	1	60	-	10	20	91	284	1,459	2,350
Other DNA viruses												
Papovavirus group	-	-	-	-	-	-	-	1	1	-	6	11
Parvovirus	-	-	-	-	3	-	8	16	27	44	243	451
Picornavirus family												
Coxsackievirus B4	-	-	-	-	1	-	-	-	1	-	4	-
Echovirus type 7	-	1	-	-	-	-	-	-	1	-	33	1
Echovirus type 9	-	1	-	-	-	-	-	-	1	3	4	26
Rhinovirus (all types)	-	6	-	-	-	-	-	11	17	48	283	324
Enterovirus not typed/pending	-	1	1	-	-	-	-	27	29	65	617	622
Picornavirus not typed	-	-	-	-	-	-	-	2	2	-	2	-
Ortho/paramyxoviruses												
Influenza A virus	2	73	1	3	71	-	46	105	301	282	908	2,104
Influenza B virus	-	16	-	-	79	-	32	17	144	70	373	271
Parainfluenza virus type 1	-	-	-	-	4	-	1	1	6	6	219	40
Parainfluenza virus type 2	-	-	-	-	1	-	-	2	3	6	31	104
Parainfluenza virus type 3	-	5	-	3	20	-	3	33	64	109	223	560
Respiratory syncytial virus	1	26	-	3	57	12	28	68	195	464	2,545	3,175
Other RNA viruses												
HTLV-1	-	-	-	-	-	-	-	1	1	2	5	9
Rotavirus	62	178	-	1	85	6	41	43	416	296	1,181	1,634
Reovirus (unspecified)	-	1	-	-	-	-	-	-	1	-	2	2

Table 5 (continued). Virology and serology laboratory reports by State or Territory[1] for the reporting period 1 to 30 September 2000, and total reports for the year[2]

	State or Territory[1]								This period 2000	This period 1999	Year to date 2000[3]	Year to date 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
Other												
Chlamydia trachomatis not typed	-	23	-	3	47	1	7	70	151	474	2,210	3,597
Chlamydia psittaci	-	-	-	-	-	4	6	-	10	4	69	62
Mycoplasma pneumoniae	-	3	-	-	18	-	25	7	53	152	447	1,144
Coxiella burnetii (Q fever)	-	-	-	-	2	-	1	1	4	53	53	287
Rickettsia spp - other	-	-	-	-	-	-	-	1	1	1	9	11
Streptococcus group A	-	-	-	-	-	-	11	-	11	143	246	556
Bordetella pertussis	-	14	-	-	6	2	30	3	55	87	440	1,001
Legionella pneumophila	-	-	-	-	2	-	1	-	3	2	32	17
Legionella longbeachae	-	-	-	-	3	-	-	2	5	-	43	23
Cryptococcus species	-	1	-	-	-	-	-	-	1	-	10	6
Leptospira species	-	-	-	1	3	-	-	-	4	7	40	77
Treponema pallidum	-	-	-	3	48	-	-	-	51	246	547	1,060
Toxoplasma gondii	1	-	-	-	-	-	1	-	2	-	11	5
Total	72	392	4	22	587	28	310	526	1,941	3,440	16,603	25,579

1. State or Territory of postcode, if reported, otherwise State or Territory of reporting laboratory.
2. From January 2000 data presented are for reports with report dates in the current period. Previously reports included all data received in that period.
3. Totals comprise data from all laboratories. Cumulative figures are subject to retrospective revision, so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.

\- No data received this period.

* Yet to be notified to NNDSS

Table 6. Australian Sentinel Practice Research Network reports, weeks 35 to 38, 2000

Week number	35		36		37		38	
Week ending on	3 September 2000		10 September 2000		17 September 2000		24 September 2000	
Doctors reporting	64		65		64		58	
Total encounters	8,186		8,097		7,849		6,768	
Condition	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	138	16.9	197	24.3	166	21.1	117	17.3
Chickenpox	10	1.2	10	1.2	13	1.7	6	0.9
Gastroenteritis	84	10.3	69	8.5	64	8.2	73	10.8
Gastroenteritis with stool culture	8	1.0	13	1.6	10	1.3	9	1.3
ADT immunisations	19	2.3	30	3.7	38	4.8	39	5.8

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The system coordinates the national surveillance of close to 50 communicable diseases or disease groups endorsed by the National Health and Medical Research Council (NHMRC). Notifications of these diseases are made to State and Territory health authorities under the provisions of their respective public health legislations. De-identified core unit data are supplied fortnightly for collation, analysis and dissemination. For further information, see Commun Dis Intell *2000;24:6-7.*

LabVISE is a sentinel reporting scheme. Currently 17 laboratories contribute data on the laboratory identification of viruses and other organisms. This number may change throughout the year. Data are collated and published in Communicable Diseases Intelligence *monthly. These data should be interpreted with caution as the number and type of reports received is subject to a number of biases. For further information, see* Commun Dis Intell *2000;24:10.*

ASPREN currently comprises about 120 general practitioners from throughout the country, not all of whom report each week. Between 7,000 and 8,000 consultations are reported each week, with special attention to 14 conditions chosen for sentinel surveillance in 2000. Communicable Diseases Intelligence *reports the consultation rates for five of these. For further information, including case definitions, see* Commun Dis Intell *2000;24:7-8.*

Additional Reports

Rotavirus Surveillance

Paul Masendycz, Royal Children's Hospital, Parkville, Vic 3052 for the National Rotavirus Reference Centre.

The National Rotavirus Reference Centre (NRRC) undertakes surveillance and characterisation of rotavirus strains causing epidemics of severe diarrhoea in young children throughout Australia. There are currently fourteen laboratories contributing data and rotavirus specimens for the characterisation of representative rotavirus serotypes. The NRRC is happy to receive notifications of rotavirus outbreaks Australia-wide.

The NRRC can be contacted at the Murdoch Children's Research Institute, Department of Gastroenterology and Clinical Nutrition, Royal Children's Hospital, Flemington Road, Parkville, Victoria 3052. Telephone: (03) 9345 5069. Fax: (03) 9345 6240.
E-mail: masendyp@cryptic.rch.unimelb.edu.au. For more information see Commun Dis Intell *2000;24:10.*

June to August, 2000

Rotavirus reports have been received from most Australian centres for the period 1 June to 31 August 2000. All Australian capital cities with the exception of Adelaide, Brisbane and Hobart experienced a drop in rotavirus reports compared with the same time last year.[1] Perth in particular had a quiet season reporting 36 rotavirus cases in August 2000, compared with 65 in 1999. This lower incidence was also noted in Melbourne, with 32 cases in August 2000, 22 less than August 1999. Sydney and Townsville had slow starts to their rotavirus seasons. The total number for Australia for the period 1 June to 31 August 2000 (793) was lower than for the same period last year (909).

The rotavirus season of most centres appeared to follow the winter/spring peak, with Western Australia and the Northern Territory experiencing earlier rotavirus season peaks (Figure 10). The Northern Territory experienced a rotavirus season that peaked in May 2000; all 48 reports were from Alice Springs. The timing of the Alice Springs 2000 season appears to be representative of a 'normal' rotavirus season (Fran Morey, Alice Springs Hospital; personal communication). Alice Springs experienced two rotavirus seasons in 1999 (April and October). Serotype analysis of isolates from the Alice Springs specimens, showed that most of the children shared the same infecting rotavirus, serotype G1.

In 2000, in both the north and south of Western Australia, the season appeared to follow that of the Northern Territory, peaking a month after Alice Springs. Centres in Queensland, New South Wales, Victoria, South Australia and Tasmania had not experienced their respective peaks by August 2000.

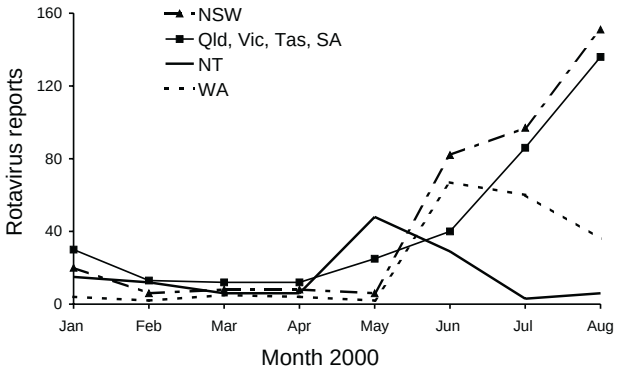
Further surveillance

In order to gain a greater insight into the importance of enteric pathogens, the NRRC has undertaken a pilot study on the prevalence of astrovirus in children admitted to hospital with acute gastroenteritis. We have begun to screen specimens that have had no bacterial or viral pathogen identified by normal diagnostic testing. The specimens are screened by northern hybridisation dot blot analysis. Our results to date show the pathogen may be responsible for up to 4 per cent of hospital admissions in Melbourne. We plan to continue the astrovirus surveillance in other Australian centres and we welcome contributions and comments from interested parties.

The NRRC welcomes contributions from all centres experiencing gastroenteritis outbreaks. The NRRC can be contacted by E-mail, fax or telephone.

1. Masendycz P, Bogdanovic-Sakran N, Palombo E, Bishop R, Barnes G. Annual report of the Rotavirus Surveillance Program, 1999/2000. *Commun Dis Intell* 2000;24:195-198.

Figure 10. Rotavirus reports, Australia, 1 January to 31 August 2000, by region



Editorial note. Virology and serology reports for rotavirus for 1 June to 31 August communicated to the CDHAC (as reported in the July, August, and September editions of *Commun Dis Intell* 2000;24: Table 4) totalled 484 for this period in 2000 and 1,000 in 1999. *CDI* data depend on voluntary reporting to the CDHAC. Not all laboratories report to both the Commonwealth Department of Health and Aged Care and to the NRRC.

HIV and AIDS Surveillance

National surveillance for HIV disease is coordinated by the National Centre in HIV Epidemiology and Clinical Research (NCHECR), in collaboration with State and Territory health authorities and the Commonwealth of Australia. Cases of HIV infection are notified to the National HIV Database on the first occasion of diagnosis in Australia, by either the diagnosing laboratory (Australian Capital Territory, New South Wales, Tasmania, Victoria) or by a combination of laboratory and doctor sources (Northern Territory, Queensland, South Australia, Western Australia). Cases of AIDS are notified through the State and Territory health authorities to the National AIDS Registry. Diagnoses of both HIV infection and AIDS are notified with the person's date of birth and name code, to minimise duplicate notifications while maintaining confidentiality.

Tabulations of diagnoses of HIV infection and AIDS are based on data available three months after the end of the reporting interval indicated, to allow for reporting delay and to incorporate newly available information. More detailed information on diagnoses of HIV infection and AIDS is published in the quarterly Australian HIV Surveillance Report, and annually in HIV/AIDS and related diseases in Australia Annual Surveillance Report. The reports are available from the National Centre in HIV Epidemiology and Clinical Research, 376 Victoria Street, Darlinghurst NSW 2010. Internet: http://www.med.unsw.edu.au/nchecr. Telephone: (02) 9332 4648. Facsimile: (02) 9332 1837.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 to 31 May 2000, as reported to 31 August 2000, are included in this issue of Commun Dis Intell *(Tables 7 and 8).*

Table 7. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 May 2000, by sex and State or Territory of diagnosis

		State or Territory								Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 2000	This period 1999	Year to date 2000	Year to date 1999
HIV diagnoses	Female	1	2	0	2	0	0	2	1	8	6	35	29
	Male	2	21	1	3	0	0	19	3	49	54	266	272
	Sex not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total[1]	3	23	1	5	0	0	21	4	57	60	302	301
AIDS diagnoses	Female	0	0	0	1	0	0	0	0	1	1	8	6
	Male	0	1	0	1	0	0	2	1	5	10	57	61
	Total[1]	0	1	0	2	0	0	2	1	6	11	65	67
AIDS deaths	Female	0	0	0	0	0	0	0	1	1	1	4	2
	Male	0	4	0	1	0	0	2	0	7	4	32	44
	Total[1]	0	4	0	1	0	0	2	1	8	5	36	47

1. Persons whose sex was reported as transgender are included in the totals.

Table 8. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 May 2000, by sex and State or Territory

		State or Territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	28	611	11	158	61	5	219	119	1,212
	Male	225	11,042	111	2,012	680	78	3,938	925	19,011
	Sex not reported	0	247	0	0	0	0	24	0	271
	Total[1]	253	11,920	122	2,177	741	83	4,195	1,048	20,539
AIDS diagnoses	Female	9	188	1	49	25	3	70	26	371
	Male	86	4,652	35	829	347	44	1,632	355	7,980
	Total[1]	95	4,852	36	880	372	47	1,710	383	8,375
AIDS deaths	Female	4	113	0	32	15	2	49	17	232
	Male	66	3,179	24	570	231	29	1,277	248	5,624
	Total[1]	70	3,300	24	604	246	31	1,332	266	5,873

1. Persons whose sex was reported as transgender are included in the totals.

Childhood Immunisation Coverage

Tables 9 and 10 provide the latest quarterly report on childhood immunisation coverage from the Australian Childhood Immunisation Register (ACIR).

The data show the percentage of children fully immunised at age 12 months for the cohort born between 1 April and 30 June 1999 and at 24 months of age for the cohort born between 1 April and 30 June 1998, according to the Australian Standard Vaccination Schedule.

A full description of the methodology used can be found in Commun Dis Intell *1998;22:36-37.*

Table 9. Percentage of children immunised at 1 year of age, preliminary results by disease and State for the birth cohort 1 April to 30 June 1999; assessment date 30 September 2000

	State or Territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	1,114	21,775	933	12,499	4,657	1,548	15,051	6,514	64,091
Diphtheria, Tetanus, Pertussis (%)	92.0	88.8	82.7	91.0	90.5	90.5	90.8	88.6	89.8
Poliomyelitis (%)	92.2	89.1	85.6	91.0	90.6	91.3	91.4	89.4	90.2
Haemophilus influenzae type b (%)	91.8	89.0	89.7	91.3	90.5	91.0	91.4	89.5	90.3
Fully immunised (%)	91.7	87.8	80.5	90.3	90.0	89.8	90.2	87.7	89.0
Change in fully immunised since last quarter (%)	+0.6	+1.3	-2.2	+0.6	-0.2	-1.3	+0.2	+0.8	+0.6

Table 10. Proportion of children immunised at 2 years of age, preliminary results by disease and State for the birth cohort 1 April to 30 June 1998; assessment date 30 September 2000[1]

	State or Territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	1,065	21,599	927	12,712	4,591	1,471	15,190	6,489	64,044
Diphtheria, Tetanus, Pertussis (%)	90.1	87.7	80.8	91.0	90.1	88.6	89.6	87.6	88.9
Poliomyelitis (%)	93.4	90.6	93.0	92.7	94.2	94.0	93.3	91.4	92.2
Haemophilus influenzae type b (%)	89.8	87.7	88.5	91.0	90.2	89.1	89.9	87.8	89.2
Measles, Mumps, Rubella (%)	93.5	89.7	90.2	92.8	92.3	93.5	92.0	90.3	91.3
Fully immunised (%)[2]	88.0	80.7	77.1	87.4	85.4	84.6	84.1	81.6	83.4
Change in fully immunised since last quarter (%)	+1.0	+2.7	+2.5	+1.2	+1.2	+1.9	+0.7	+2.1	+1.7

1. The 12 months age data for this cohort was published in *Commun Dis Intell* 1999;23:314.
2. These data relating to 2 year old children should be considered as preliminary. The proportions shown as 'fully immunised' appear low when compared with the proportions for individual vaccines. This is at least partly due to poor identification of children on immunisation encounter forms.