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 (*MMWR 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 December, 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'.*

In December 2000, compared with the 5-year mean, reports of incident hepatitis C (ratio 1.3), chlamydial infection (1.2), Barmah Forest virus (1.1) and meningococcal infection (ratio 1.5) increased (Figure 1, Table 1).

Gastrointestinal illness

Campylobacter notifications fell to 885 cases in December from 1299 cases in the previous month with a rate of 83.7/100,000 population but overall the trend in notifications is increasing. *Salmonella* notifications were lower than in the previous month with a rate of 32.1/100,000 population. Tasmania had the highest rate for *Campylobacter* (148/100,000 population) and the Northern Territory the highest for *Salmonella* (178/100,000 population).

Five cases of typhoid have been reported, four males in the 15 to 44 years age group and a 40-year-old female: four acquired the disease overseas, two from India, one from Indonesia (see Dr David Peacock's additional report, p32) and one from an unreported country. The New South Wales case had no history of overseas travel.

Shiga-toxin producing *Escherichia coli* was detected in South Australia in a 79-year-old male.

There were 4 cases of haemolytic uranic syndrome in December, two male children aged 1 year and 2 years from Queensland and Western Australia respectively, and two females aged 58 years and 83 years both from New South Wales.

Chlamydial infection

There were 1056 notifications of chlamydial infection in December 2000, a notification rate of 66.1/100,000 population – an increase from previous years. Of these cases, 84 per cent were in the 15 to 34 years age range; the male:female ratio was 0.7:1. The Northern Territory continues to have the highest rate for chlamydial infection (337.7/100,000 population).

Vaccine preventable diseases

Apart from one report of tetanus, vaccine preventable disease reports for December were below those for the previous month and for the 5-year mean. The tetanus case, a 17-year-old male, was reported from New South Wales: his immunisation status was unknown.

Pertussis notifications were down compared with the previous month (397 cases with a rate of 24.9/100,000 population compared with 622 cases with a rate of 39/100,000 population). Since August 2000 (when the national rate for the year peaked at 46/100,000 population) the rates for all States except the Northern Territory have decreased. The rate for the Northern Territory increased from the previous month (18.7 per 100,000 population) to 24.9 per 100,000 population in December 2000.

Measles cases continue to be at their lowest level since the national notification system began. Five cases were reported in December 2000, all in New South Wales (see: Outbreak Report, p19). They included four partially vaccinated children (two boys aged 1 and 5 years and two

girls aged 3 and 4 years) and a 31-year-old unimmunised male.

Of the *Haemophilus influenza* type b cases, three were children (a 1-year-old girl, and two boys aged 3 and 6 years) and one a 16-year-old female. The 16-year-old had not been immunised. The immunisation status of the 3-year-old was not stated and that of the other two cases unknown.

Legionellosis

There were 17 notifications of legionellosis in December 2000, a notification rate of 1.1/100,000 population. One case in Queensland was *Legionella pneumophila* and two in South Australia *Legionella longbeachae*. For the other cases information on the *Legionella* species involved was not available.

Meningococcal infections

There were 48 notifications of meningococcal infection in December 2000, a notification rate of 3.0/100,000 population. Of these cases, 40 per cent were under 5 years of age and 31 per cent were in the 5 to 19 years age group. The serogroups were available for 19 cases; these were serogroup B (68%) and serogroup C (32%).

Vectorborne diseases

In December there were fewer Barmah Forest virus infection notifications compared with November (51 cases with a rate of 3.2/100,000 population compared with 66 cases with a rate of 4.1/100,000 population) but these were slightly higher than the 5-year mean (48 cases). The majority (27 cases, 9.1/100,000 population) were from Queensland.

Ross River Virus notifications remain unchanged (159 cases with a rate of 10.0/100,000 population compared with November 2000, 164 cases with a rate of 10.3/100,000 population) the highest rate being in the Northern Territory (104.4/100,000 population). Most cases were reported from Queensland (62) and South Australia (51).

Outbreak report: measles cluster in south-eastern Sydney with transmission in a general practice waiting room.

Contributed by the Infectious Diseases Team and Director,
South Eastern Sydney Public Health Unit, Zetland, NSW

South Eastern Sydney Public Health Unit recently investigated a cluster of 5 cases of measles with onset in December 2000. The index case was a 31-year-old male who presented to his doctor with a rash and fever. The diagnosis was confirmed by a positive measles IgM assay at a private pathology laboratory. The illness was thought to have been acquired through occupational exposure in another health area. The second and third cases were siblings aged 18 months and 3 years who were thought to have become infected after a few minutes' contact with the index case in the waiting room of a local general practice. Measles was subsequently transmitted to 2 other children, aged 5 and 4 years, who were childcare contacts of the second case. All 4 affected children had documentation of one MMR vaccination at 1 year of age whilst the 5-year-old had documentation of a second MMR vaccine dose at 4 to 5 years of age. In addition to the index case, laboratory confirmation was obtained for 3 of the 4 subsequent cases by the Serology and Virology Laboratories, SEALS Randwick. In 2 cases, measles IgM was detected, and in 2 cases measles antigen was detected in throat swabs by direct immunofluorescence.

Tables

There were 5,585 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification date in December 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 2000 issue of *Commun Dis Intell*. Data by date of report for December 2000, are included in this issue of *Commun Dis Intell* (Table 3). Figure 1 illustrates, for selected diseases, the December 2000 totals as ratios to the mean of their November to January levels for the previous 5 years.

There were 1,247 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the reporting period, 1 to 31 December 2000 (Tables 4 and 5).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 48 to 52, ending 31 December 2000, are included in this issue of *Commun Dis Intell* (Table 6).

Table 1. Notifications of diseases received by State and Territory health authorities in the period 1 to 31 December 2000, by date of notification[#]

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total December 2000[1]	Total November 2000[1]	Total December 1999[1]	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Bloodborne															
Hepatitis B (incident)	0	3	0	6	0	0	10	4	23	35	31	23	413	276	1.0
Hepatitis B (unspecified)[2]	2	200	0	66	12	1	162	40	483	791	537	525	8,631	6,833	0.9
Hepatitis C (incident)	1	5	0	-	12	0	4	4	26	27	30	20	494	205	1.3
Hepatitis C (unspecified)[2]	11	455	13	216	46	14	390	88	1,233	1,641	1,453	1,332	20,672	15,841	0.9
Hepatitis D	0	1	0	0	0	0	1	0	2	10	1	1	27	20	1.8
Gastrointestinal															
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.0
Campylobacterosis[3]	25	-	21	262	133	58	275	111	885	1,299	983	1,188	13,480	12,220	0.7
Haemolytic uraemic syndrome	0	2	0	1	0	0	0	1	4	1	1	1	14	n/a	-
Hepatitis A	0	8	1	11	1	0	11	4	36	44	102	168	811	2,165	0.2
Hepatitis E	0	0	0	0	0	0	0	NN	0	0	0	0	1	4	0.0
Listeriosis	0	5	0	0	2	0	0	0	7	3	5	6	66	64	1.2
Salmonellosis	4	135	29	143	37	13	97	55	513	532	534	622	6,081	6,714	0.8
Shigellosis[3]	1	-	6	8	3	0	22	4	44	38	36	55	488	669	0.8
SLTEC,VTEC[4]	0	0	0	NN	1	0	0	NN	1	1	6	3	33	n/a	-
Typhoid	0	1	1	0	0	0	1	2	5	3	7	7	65	74	0.7
Yersiniosis[3]	0	-	0	4	0	0	2	0	6	3	7	20	73	232	0.3
Quarantinable															
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	1	4	-
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]	16	236	55	291	151	8	151	148	1,056	1,656	1,009	864	17,718	9,897	1.2
Donovanosis	0	0	0	0	NN	0	0	0	0	0	0	4	12	45	0.0
Gonococcal infection[6]	3	55	73	67	11	0	47	42	298	415	416	408	6,047	4,649	0.7
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Syphilis[7]	1	38	7	36	2	0	0	5	89	187	107	120	1,932	1,666	0.7

Table 1 continued. Notifications of diseases received by State and Territory health authorities in the period 1 to 31 December 2000, by date of notification[#]

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total December 2000[1]	Total November 2000[1]	Total December 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	1	1	0	0	0	1	4	6	3	4	32	51	1.0
Measles	0	5	0	0	0	0	0	0	5	10	4	39	109	610	0.1
Mumps	0	2	1	0	2	0	3	1	9	12	14	13	208	168	0.7
Pertussis	6	224	4	54	52	1	50	6	397	622	424	665	5,772	5,942	0.6
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Rubella[8]	0	14	0	2	1	0	4	1	22	51	17	193	314	1,931	0.1
Tetanus	0	1	0	0	0	0	0	0	1	0	0	1	8	5	-
Vectorborne															
Arbovirus infection NEC	0	0	0	0	0	0	0	0	0	0	0	5	64	56	0.0
Barmah Forest virus infection	0	10	2	27	2	0	5	5	51	66	43	48	622	698	1.1
Dengue	0	0	0	0	1	0	0	0	1	3	26	31	210	195	0.0
Malaria	2	11	2	9	5	0	8	4	41	47	65	59	951	724	0.7
Ross River virus infection	1	9	17	62	51	0	12	7	159	164	290	337	4,137	4,946	0.5
Zoonoses															
Brucellosis	0	0	0	2	0	0	0	0	2	4	3	4	26	40	0.5
Hydatid infection	0	NN	0	1	0	0	2	0	3	3	4	3	27	45	0.9
Leptospirosis	0	5	3	7	1	0	2	0	18	22	20	18	244	204	1.0
Ornithosis	0	NN	0	NN	0	0	8	0	8	14	7	10	98	91	0.8
Q fever	0	6	0	22	1	0	2	0	31	50	45	43	519	537	0.7
Other															
Legionellosis	0	0	0	1	2	0	12	2	17	34	16	18	469	207	0.9
Leprosy	0	0	0	0	0	0	0	0	0	1	1	1	4	8	0.0
Meningococcal infection	0	15	2	8	4	2	15	2	48	52	46	32	601	461	1.5
Tuberculosis	1	24	0	1	0	0	29	2	57	68	92	90	960	1,058	0.6
Total	74	1,471	238	1,308	533	97	1,325	539	5,585	7,915	6,385	6,755	92,436	79,558	

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 mean of last 5 years calculated as described above.

n/a Not calculated as only notifiable for under 5 years.

Table 2. Crude incidence of diseases by State or Territory, 1 to 31 December 2000. (Rate per 100,000 population)

	State or Territory								
Disease[1]	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Bloodborne									
Hepatitis B (incident)	0.0	0.6	0.0	2.0	0.0	0.0	2.5	2.5	1.4
Hepatitis B (unspecified)[2]	7.6	37.1	0.0	22.2	9.6	2.6	40.8	25.5	30.3
Hepatitis C (incident)	3.8	0.9	0.0	-	9.6	0.0	1.0	2.5	2.0
Hepatitis C (unspecified)[2]	42.0	84.5	79.8	72.7	36.9	35.7	98.2	56.1	77.2
Hepatitis D	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.1
Gastrointestinal									
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacterosis[3]	95.5	-	128.9	88.2	106.6	148.0	69.2	70.7	83.7
Haemolytic uraemic syndrome	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.6	0.3
Hepatitis A	0.0	1.5	6.1	3.7	0.8	0.0	2.8	2.5	2.3
Hepatitis E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NN	0.0
Listeriosis	0.0	0.9	0.0	0.0	1.6	0.0	0.0	0.0	0.4
Salmonellosis	15.3	25.1	178.0	48.1	29.6	33.2	24.4	35.0	32.1
Shigellosis[3]	3.8	-	36.8	2.7	2.4	0.0	5.5	2.5	4.2
SLTEC,VTEC[4]	0.0	0.0	0.0	NN	0.8	0.0	0.0	NN	0.1
Typhoid	0.0	0.2	6.1	0.0	0.0	0.0	0.3	1.3	0.3
Yersiniosis[3]	0.0	-	0.0	1.3	0.0	0.0	0.5	0.0	0.6
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]	61.1	43.8	337.7	97.9	121.0	20.4	38.0	94.3	66.1
Donovanosis	0.0	0.0	0.0	0.0	NN	0.0	0.0	0.0	0.0
Gonococcal infection[6]	11.5	10.2	448.2	22.5	8.8	0.0	11.8	26.8	18.7
Lymphogranuloma venereum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Syphilis[7]	3.8	7.1	43.0	12.1	1.6	0.0	0.0	3.2	5.6
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	6.1	0.3	0.0	0.0	0.0	0.6	0.3
Measles	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Mumps	0.0	0.4	6.1	0.0	1.6	0.0	0.8	0.6	0.6
Pertussis	22.9	41.6	24.6	18.2	41.7	2.6	12.6	3.8	24.9
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rubella[8]	0.0	2.6	0.0	0.7	0.8	0.0	1.0	0.6	1.4
Tetanus	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Vectorborne									
Arbovirus infection NEC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barmah Forest virus infection	0.0	1.9	12.3	9.1	1.6	0.0	1.3	3.2	3.2
Dengue	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1
Malaria	7.6	2.0	12.3	3.0	4.0	0.0	2.0	2.5	2.6
Ross River virus infection	3.8	1.7	104.4	20.9	40.9	0.0	3.0	4.5	10.0

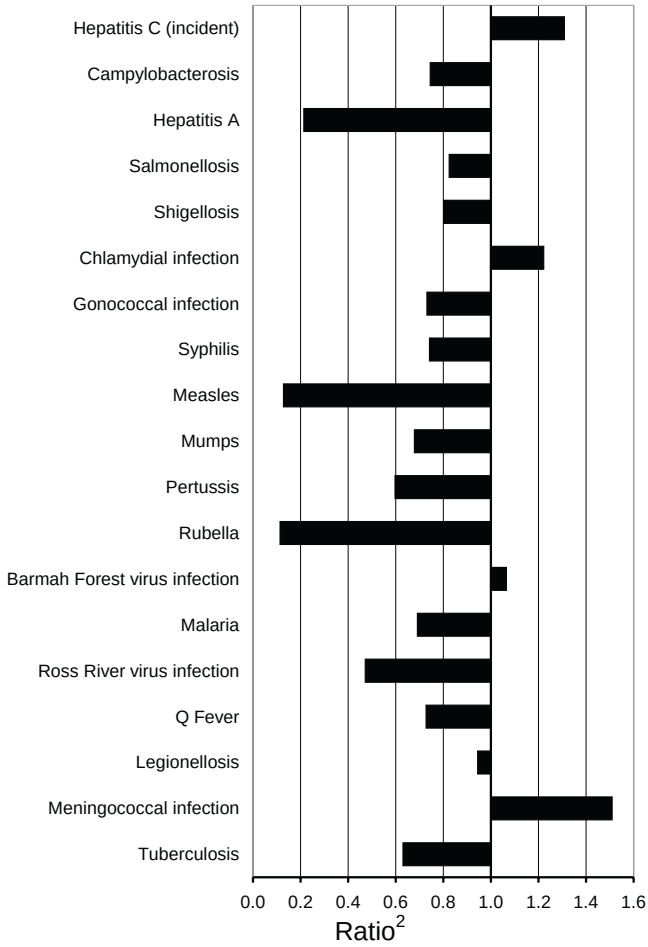
Table 2 (continued). Crude incidence of diseases by State or Territory, 1 to 31 December 2000. (Rate per 100,000 population)

Disease[1]	State or Territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Zoonoses									
Brucellosis	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.1
Hydatid infection	0.0	NN	0.0	0.3	0.0	0.0	0.5	0.0	0.3
Leptospirosis	0.0	0.9	18.4	2.4	0.8	0.0	0.5	0.0	1.1
Ornithosis	0.0	NN	0.0	NN	0.0	0.0	2.0	0.0	1.1
Q fever	0.0	1.1	0.0	7.4	0.8	0.0	0.5	0.0	1.9
Other									
Legionellosis	0.0	0.0	0.0	0.3	1.6	0.0	3.0	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	0.0	2.8	12.3	2.7	3.2	5.1	3.8	1.3	3.0
Tuberculosis	3.8	4.5	0.0	0.3	0.0	0.0	7.3	1.3	3.6
Total	282.8	273.1	1,461.1	440.1	427.1	247.5	333.6	343.3	349.8

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.

Figure 1. Selected[1] diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 to 31 December 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 November to January data for the previous five years

Table 3. Notifications of diseases received by State and Territory health authorities in the period 1 to 31 December 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	1	1	6	2	0	11	5	26	418
Hepatitis B (unspecified)[2]	2	260	0	74	16	1	163	48	564	8,831
Hepatitis C (incident)	1	7	0	-	10	0	1	5	24	503
Hepatitis C (unspecified)[2]	9	622	15	245	48	19	387	128	1,473	20,929
Hepatitis D	0	1	0	0	0	0	1	0	2	27
Gastrointestinal										
Botulism	0	0	0	0	0	0	0	0	0	2
Campylobacterosis[3]	22	-	12	230	141	49	293	148	895	13,518
Haemolytic uraemic syndrome	0	0	0	0	1	0	0	1	2	11
Hepatitis A	0	6	2	9	1	0	14	6	38	838
Hepatitis E	0	0	0	0	0	0	0	NN	0	1
Listeriosis	0	3	0	0	2	0	0	0	5	65
Salmonellosis	4	146	34	108	28	16	97	76	509	6,130
Shigellosis[3]	1	-	8	7	3	0	27	7	53	488
SLTEC,VTEC[4]	0	0	0	NN	2	0	0	NN	2	36
Typhoid	0	2	0	0	0	0	3	2	7	68
Yersiniosis[3]	0	-	0	4	0	0	2	0	6	74
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]	16	303	64	340	157	13	205	199	1,297	17,765
Donovanosis	0	0	0	0	NN	0	0	0	0	13
Gonococcal infection[6]	3	67	59	59	18	0	48	65	319	6,088
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0
Syphilis[7]	1	45	5	58	1	0	1	7	118	1,990
Vaccine preventable										
Diphtheria	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae type b	0	0	2	1	0	0	0	1	4	32
Measles	0	6	0	0	0	0	0	0	6	110
Mumps	0	1	1	0	2	0	4	1	9	211
Pertussis	5	350	3	47	101	1	57	17	581	5,876
Poliomyelitis	0	0	0	0	0	0	0	0	0	0
Rubella[8]	0	16	0	4	2	0	5	2	29	315
Tetanus	0	1	0	0	0	0	0	0	1	9
Vectorborne										
Arbovirus infection NEC	0	0	0	0	0	0	0	0	0	65
Barmah Forest virus infection	0	12	1	35	2	0	4	8	62	633
Dengue	0	0	0	1	0	0	0	0	1	231
Malaria	0	10	3	15	4	0	10	6	48	974
Ross River virus infection	1	11	6	53	59	0	12	16	158	4,288

Table 3 (continued). Notifications of diseases received by State and Territory health authorities in the period 1 to 31 December 2000, by date of report*

Disease[1]	State or Territory ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total this period	Year to date total
Zoonoses										
Brucellosis	0	0	0	4	0	0	0	0	4	26
Hydatid infection	0	NN	0	0	0	0	3	0	3	28
Leptospirosis	0	2	2	3	2	0	6	0	15	245
Ornithosis	0	NN	0	NN	0	1	16	0	17	104
Q fever	0	6	0	21	0	0	6	0	33	536
Other										
Legionellosis	0	4	1	2	3	0	22	2	34	474
Leprosy	0	0	0	0	0	0	0	0	0	5
Meningococcal infection	0	20	2	5	4	3	13	4	51	603
Tuberculosis	3	37	2	3	0	0	30	7	82	1,051
Total	68	1,939	223	1,334	609	103	1,441	761	6,478	93,613

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 31 December 2000[1]

State or Territory	Laboratory	This period	Total this period[2]
Australian Capital Territory	The Canberra Hospital	-	-
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	71	72
	New Children's Hospital, Westmead	36	81
New South Wales	Repatriation General Hospital, Concord	-	-
	Royal Prince Alfred Hospital, Camperdown	28	21
	South West Area Pathology Service, Liverpool	-	152
Queensland	Queensland Medical Laboratory, West End	330	973
	Townsville General Hospital	15	20
South Australia	Institute of Medical and Veterinary Science, Adelaide	497	1,042
Tasmania	Northern Tasmanian Pathology Service, Launceston	12	11
	Royal Hobart Hospital, Hobart	-	-
Victoria	Monash Medical Centre, Melbourne	-	-
	Royal Children's Hospital, Melbourne	89	117
	Victorian Infectious Diseases Reference Laboratory, Fairfield	110	209
Western Australia	PathCentre Virology, Perth	-	-
	Princess Margaret Hospital, Perth	32	38
	Western Diagnostic Pathology	27	-
Total		1,247	2,736

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 31 December 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	-	-	-	2	3	44	172
Rubella virus	-	2	-	1	2	-	-	-	5	5	47	145
Hepatitis viruses												
Hepatitis A virus	-	-	-	2	1	-	-	-	3	24	137	375
Hepatitis D virus	-	1	-	-	-	-	-	-	1	1	9	8
Arboviruses												
Ross River virus	-	1	8	11	35	-	-	3	58	129	1,250	1,423
Barmah Forest virus	-	1	1	10	2	-	-	-	14	22	158	180
Adenoviruses												
Adenovirus not typed/pending	1	8	-	6	44	-	9	5	73	122	982	1,128
Herpes viruses												
Cytomegalovirus	-	14	-	6	46	-	16	4	86	145	1,262	1,216
Varicella-zoster virus	2	8	2	65	22	-	21	2	122	174	1,296	1,658
Epstein-Barr virus	-	3	3	32	51	-	14	14	117	205	1,852	2,194
Other DNA viruses												
Parvovirus	-	1	2	20	12	-	1	-	36	25	350	437
Picornavirus family												
Coxsackievirus B1	-	-	-	-	1	-	2	-	3		4	1
Coxsackievirus B4	-	-	-	-	-	-	4	-	4	2	15	3
Coxsackievirus B5	-	-	-	-	-	-	1	-	1		5	7
Poliovirus type 1 (uncharacterised)	-	2	-	-	-	-	-	-	2		18	26
Poliovirus type 2 (uncharacterised)	-	1	-	-	-	-	-	-	1	2	8	16
Rhinovirus (all types)	2	21	-	-	4	-	-	-	27	51	376	501
Enterovirus type 71 (BCR)	-	1	-	-	-	-	-	-	1	4	2	15
Enterovirus not typed/pending	-	1	-	4	1	3	19	-	28	48	711	752
Ortho/paramyxoviruses												
Influenza A virus	2	4	-	-	26	-	2	3	37	70	1,366	1,898
Influenza B virus	2	-	-	1	12	-	-	1	16	4	550	279
Parainfluenza virus type 1	-	-	-	-	1	-	-	-	1	6	230	44
Parainfluenza virus type 3	-	14	-	10	19	-	1	8	52	62	459	803
Respiratory syncytial virus	-	5	-	7	16	-	-	1	29	77	2,689	3,054
Other RNA viruses												
Rotavirus	-	8	-	-	52	4	14	8	86	167	1,720	2,244
Norwalk agent	-	-	-	-	1	-	16	-	17	4	75	59
Other												
Chlamydia trachomatis not typed	4	31	7	48	55	1	8	1	155	322	2,855	3,289
Chlamydia psittaci	-	-	-	-	-	-	7	-	7	5	100	78
Mycoplasma pneumoniae	-	1	1	17	17	2	21	5	64	92	646	1,125
Coxiella burnetii (Q fever)	-	-	-	7	-	-	3	-	10	14	90	221
Rickettsia - Spotted fever group	-	-	-	-	-	4	-	-	4		6	1
Streptococcus group A	-	2	3	11	-	-	2	-	18	47	348	368
Yersinia enterocolitica	-	1	-	-	-	-	-	-	1		14	10
Bordetella pertussis	-	8	-	11	27	-	30	-	76	76	665	845

Table 5 (continued). Virology and serology laboratory reports by State or Territory[1] for the reporting period 1 to 31 December 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				
Legionella pneumophila	-	-	-	-	-	-	3	-	3		42	17
Legionella longbeachae	-	-	-	-	1	-	-	-	1	12	53	51
Cryptococcus species	-	-	-	-	3	-	-	-	3		18	9
Leptospira species	-	-	-	5	2	-	-	-	7	4	59	55
Treponema pallidum	-	2	14	16	44	-	-	-	76	89	855	774
Total	14	141	41	290	498	14	194	55	1,247	2,013	21,366	25,481

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.

Table 6. Australian Sentinel Practice Research Network reports, weeks 48 to 52, 2000*

Week number	48		49		50		51	
Week ending on	3 December 2000		10 December 2000		17 December 2000		24 December 2000	
Doctors reporting	56		52		56		52	
Total encounters	6,484		6,709		6,877		6,274	
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	13	2.0	9	1.3	18	2.6	4	0.6
Chickenpox	16	2.5	11	1.6	9	1.3	5	0.8
Gastroenteritis	56	8.6	55	8.2	61	8.9	72	11.5
Gastroenteritis with stool culture	7	1. 1	9	1.3	11	1.6	7	1.1
ADT immunisations	28	4.3	25	3.7	26	3.8	23	3.7

* **Editorial note:** For week 52 ending 31 December 2000 there were 4 reports of influenza and 7 of chickenpox. The other conditions are no longer reported.

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 Communicable Diseases Network Australia New Zealand and the National Public Health Partnership. 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

Australian encephalitis: Chicken Surveillance Programme

Sentinel chicken flocks are used to monitor flavivirus activity in Australia. The main viruses of concern are Murray Valley encephalitis (MVE) and Kunjin which cause the potentially fatal disease Australian encephalitis in humans. Currently 29 flocks are maintained in the north of Western Australia, eight in the Northern Territory, nine in New South Wales and ten in Victoria. The flocks in Western Australia and the Northern Territory are tested year round but those in New South Wales and Victoria are tested only from November to March, during the main risk season.

Results are coordinated by the Arbovirus Laboratory in Perth and reported bimonthly. For more information and details of the location of sentinel chicken sites see Commun Dis Intell *2000;24:8-9.*

A K Broom,[1] J Azuolus,[2] L Hueston,[3] J S Mackenzie,[4] L Melville,[5] D W Smith[6] and P I Whelan[7]

1. Department of Microbiology, The University of Western Australia
2. Veterinary Research Institute, Victoria
3. Virology Department, Westmead Hospital, New South Wales
4. Department of Microbiology, The University of Queensland
5. Berrimah Agricultural Research Centre, Northern Territory
6. PathCentre, Western Australia
7. Department of Health and Community Services, Northern Territory

Sentinel chicken serology was carried out for 27 of the 29 flocks in Western Australia in November and December 2000. There were no seroconversions to flaviviruses in November. However, 10 seroconversions to flaviviruses were detected in December, 5 from Derby (Curtin Airbase) in the Kimberley 5 from Ophthalmia dam near Newman in the Pilbara. At Derby, 3 of the chickens were positive for MVE antibodies, 1 for MVE and Kunjin antibodies and 1 for Kunjin alone. All 5 of the seroconversions detected at the dam near Newman were to MVE virus. This activity was unusual as it occurred at the beginning of the wet season. As a result of these findings the Health Department of Western Australia issued a health warning to residents living in these areas warning of the increased risk of infection with MVE virus.

A new sentinel chicken flock was established at Gapuwiyak (north-east of Darwin) in the Northern Territory in November 2000. Serum samples from all of the 8 Northern Territory sentinel chicken flocks were tested in our laboratory in November and December 2000. There were no seroconversions to flaviviruses during this period. The October seroconversion to MVE virus at Beatrice Hill Farm, east of Darwin, was confirmed in the November bleed.

The MVE sentinel chicken surveillance programs in New South Wales and Victoria re-commenced in November 2000. Serum samples were tested in November and December 2000 but no flavivirus antibodies were detected.

Rotavirus Surveillance

The National Rotavirus Reference Centre (NRRC) undertakes surveillance and characterisation of rotavirus strains causing annual 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 give and receive notifications of rotavirus outbreaks Australia-wide. The NRRC can be contacted at the Murdoch Childrens Research Institute, Department of Gastroenterology and Clinical Nutrition, Royal Children's Hospital, Flemington Road, Parkville, Victoria 3052. Telephone: (03) 9345 5069, Facsimile: (03) 9345 6240,
Email: masendyp@cryptic.rch.unimelb.edu.au. For more information see Commun Dis Intell *2000;24:10.*

June to November, 2000

Rotavirus specimens have been received from Northern West Western Australia, Perth, Adelaide, Hobart, Melbourne, West Sydney, Brisbane, Townsville, Alice Springs, Gove and Darwin for the time period 1 June to 30 November 2000.

Over 600 specimens have been included in a monoclonal antibody based serotyping enzyme immunoassay (EIA). The results show that G9 rotaviruses, which were the second most important serotype in 1999/2000, were not as widespread in the first part of the 2000/2001 period. They were detected only in Brisbane, Sydney and Melbourne, having been previously identified in most other centres. The epidemiological significance of G9 rotaviruses in Australia remains unclear and further monitoring is warranted.

Serotype G2 viruses appeared in most of the centres studied, including Perth, Adelaide, Melbourne, Hobart, West Sydney, Gove and Darwin. Molecular techniques including reverse transcriptase/PCR and Northern hybridisation were required for the detection of serotype G2 viruses because the currently used G2 serotyping monoclonal antibody (MAb) derived in 1986 did not recognise these strains. Sequence analysis of the circulating G2 strains identified an amino acid change at the same position where variant viruses unreactive with this MAb also showed an amino acid substitution. This change in the virus may have implications for future vaccine development.

The collection period June to December 2000 was notable for the first 'sighting' of serotype G4 rotaviruses in the Northern Territory's 'Top End'. These G4 viruses were first detected from a child in Darwin in August 2000 and subsequently from children on Elcho Island in East Arnhem Land. Children from 10 communities in East Arnhem Land were admitted to the Gove District Hospital in Nhulunbuy and were all found to be serotype G4. Further analysis by RNA polyacrylamide gel electrophoresis and reverse transcriptase/PCR showed the children were all infected with the same epidemic strain. The outbreak was confined to the top end (as at 11 January, 2001) and appeared to be limited to the period August to October 2000.

Rotavirus collection continues, and the National Rotavirus Reference Centre welcomes any notifications of rotavirus outbreaks.

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 August 2000, as reported to 30 November 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 August 2000, by sex and State or Territory of diagnosis

										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	0	4	0	1	0	0	2	0	7	8	54	52
	Male	1	22	0	3	4	0	15	0	45	74	424	443
	Sex not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total[1]	1	26	0	4	4	0	17	0	52	82	480	495
AIDS diagnoses	Female	0	0	0	0	0	0	0	0	0	3	9	12
	Male	0	3	0	0	0	0	2	0	5	23	103	103
	Total[1]	0	3	0	0	0	0	2	0	5	26	112	115
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	0	5	3
	Male	0	5	0	1	0	0	3	0	9	7	75	75
	Total[1]	0	5	0	0	0	0	3	0	9	7	80	79

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 August 2000, by sex and State or Territory

		State or Territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	28	620	9	161	62	5	223	119	1,227
	Male	227	11,130	108	2,034	686	78	3,969	925	19,157
	Sex not reported	0	245	0	0	0	0	24	0	269
	Total[1]	255	12,016	117	2,202	748	83	4,230	1,049	20,700
AIDS diagnoses	Female	9	188	0	49	25	3	72	26	372
	Male	87	4,691	35	832	347	45	1,648	356	8,041
	Total[1]	96	4,891	35	883	372	48	1,728	384	8,437
AIDS deaths	Female	4	114	0	32	15	2	50	17	234
	Male	67	3,226	24	572	231	29	1,283	252	5,684
	Total[1]	71	3,348	24	606	246	31	1,339	270	5,935

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 July and 30 September 1999 and at 24 months of age for the cohort born between 1 July and 30 September 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 July to 30 September 1999; assessment date 31 December 2000

	State or Territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	1,094	22,277	786	12,801	4,600	1,547	15,869	6,241	65,215
Diphtheria, Tetanus, Pertussis (%)	93.3	91.1	91.0	92.4	92.5	92.5	92.5	90.8	91.8
Poliomyelitis (%)	93.1	91.0	91.0	92.3	92.4	92.4	92.4	90.8	91.8
Haemophilus influenzae type b (%)	93.1	90.9	93.1	92.6	92.4	91.7	92.4	90.6	91.7
Fully immunised (%)	92.7	90.5	89.2	92.0	92.2	91.6	92.1	90.2	91.3
Change in fully immunised since last quarter (%)	+1.0	+2.7	+8.7	+1.7	+2.2	+1.8	+1.9	+2.5	+2.3

Table 10. Proportion of children immunised at 2 years of age, preliminary results by disease and State for the birth cohort 1 July to 30 September 1998; assessment date 31 December 2000[1]

	State or Territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	1,119	22,021	853	12,712	4,691	1,636	15,949	6,386	65,367
Diphtheria, Tetanus, Pertussis (%)	90.1	88.0	84.1	91.2	92.3	91.6	90.4	88.0	89.6
Poliomyelitis (%)	93.0	91.3	91.7	93.5	94.4	94.4	93.5	91.8	92.7
Haemophilus influenzae type b (%)	89.0	87.9	87.7	91.3	91.9	91.6	90.5	88.2	89.6
Measles, Mumps, Rubella (%)	93.1	90.7	89.8	93.1	94.0	94.4	93.5	91.7	92.3
Fully immunised (%)[2]	87.8	81.9	80.0	88.3	88.6	88.6	86.4	83.1	85.1
Change in fully immunised since last quarter (%)	-0.2	+1.2	+2.9	+0.9	+3.2	+4.0	+2.3	+1.5	+1.7

1. The 12 months age data for this cohort was published in *Commun Dis Intell* 2000;24:42.
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.

Acknowledgment: These figures were provided by the Health Insurance Commission (HIC), to specifications provided by the Commonwealth Department of Health and Aged Care. For further information on these figures or data on the Australian Childhood Immunisation Register please contact the Immunisation Section of the HIC: Telephone 02 6124 6607.