Communicable Diseases Surveillance

Presentation of NNDSS data for April 2000

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 data by report date for information only. In Table 2 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 p revious 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 Weekly Feb 25, 2000:49(07);139-146); year to date 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

Communicable Diseases Surveillance consists of data from various sources. The National Notifiable Diseases Surveillance System (NNDSS) is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) is a sentinel surveillance scheme. The Australian Sentinel Practice Research Network (ASPREN) is a general practitioner-based 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'.

Bloodborne diseases

There were 1,233 notifications of hepatitis C in April 2000. This was a decrease from March 2000 (2,015), April last year (1,782), and the mean of the last 5 years (1,333). A total of 7,194 notifications of hepatitis C have been received for the year to date 2000. This was an increase from the year to date mean of the last 5 years (5,224). Of the notifications for April 2000, 15 were reported as hepatitis C incident cases. Seventy-five per cent of incident case notifications were in the 20 to 39 years age range. The male to female ratio was 1:1.1.

Gastrointestinal diseases

There were 444 notifications of salmonellosis in April 2000. This was a decrease from March 2000 (711), April last year (741) and the mean of the last 5 years (715). Forty-four per cent of cases (194) were in the 0-5 years age group. The male to female ratio was 1.1:1.

There were 4 notifications of typhoid in April 2000 and the ages ranged from 9 to 36 years. Four States currently report SLTEC/VTEC. There were 3 cases reported in April 2000, all from South Australia. There was also one case of HUS from New South Wales (NSW) in a male aged 2 years.

Quarantinable diseases

There were no cases of cholera, plague, rabies, yellow fever or viral haemorrhagic fever in April 2000.

Sexually transmissible diseases

There were 984 notifications of chlamydial infection in April 2000, which was a decrease from March 2000 (1,412) and April last year (1,242) but greater than the mean of the last 5 years (851). A total of 4,864 notifications of chlamydial infection have been received for the year to date 2000, which was a 47% increase from the year to date mean of the last 5 years (3,300). Most cases of chlamydial infection were reported from Queensland (30%) and Western Australia (25%). Eighty-six per cent of the cases were aged 15 to 34 years. The male to female ratio was 1:1.5.

There were 385 notifications of gonococcal infection in April 2000, which was a decrease from March 2000 (536), April last year (517) and the mean of the last 5 years (423). Most cases were reported from the Northern Territory (24%) and Western Australia (24%), with Queensland reporting 21% and Victoria 18%. The ages of cases ranged from 14 to 69 years, with 85% of gonococcal notifications aged 15 to 39 years. The male to female ratio was 2.6:1.

A total of 98 syphilis notifications were received in April 2000, which was a decrease from March 2000 (169), April last year (169) and the mean of the last 5 years (149). The year to date 2000 figure (531) was also lower than the year to date mean of the last 5 years (577). Most of the notifications were reported from Queensland (66%) and New South Wales (25%). Fifty per cent of syphilis cases were aged 20 to 34 years. The male to female ratio was 1.2:1.

Vaccine preventable diseases

There was a continuing decrease in the total number of vaccine preventable disease notifications with a total of 169 notifications in April 2000. This was mainly the result of the continuing decrease in notifications of pertussis.

There were no notifications of diphtheria, tetanus or poliomyelitis.

Two cases of *Haemophilus influenzae* type b were reported from Queensland. Both cases were male with unknown immunisation status: one case was a child aged under 1 year and the other an adult aged 40 years.

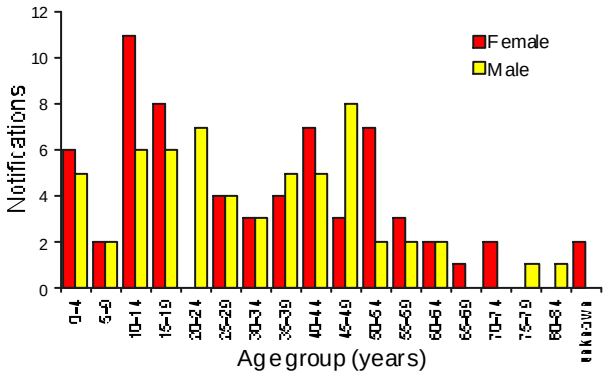
The number of notifications of measles, mumps and rubella were lower than for the same period in 1999 and for the mean of the last 5 years. However, an increase in the number of notifications of measles occurred in April 2000 (20) compared with March 2000 (11). Most measles notifications were from South Australia (30%), Victoria (30%) and NSW (13%). Measles notifications were most common in those aged under 5 years (10, 50%), with 3 cases aged under 1 year, 3 cases aged 1 year, 2 cases aged 3 years and 2 cases aged 4 years. The male to female ratio in this age group was 12.3:1. The immunisation status for this age group was reported as unknown for all but 3 cases: one child under 1 year was not immunised and 2 children aged 3 and 4 years were reported as partially immunised.

A similar pattern was seen for rubella notifications with 15 cases in April 2000 and 11 cases in March 2000. Most rubella notifications were from Queensland (47%) and Victoria (47%). Rubella notifications were most frequent in those aged under 5 years (5, 33%) and in those aged 15 to 39 years (5, 33%). Amongst those aged under 5 years, there were 4 cases aged under one year and 1 case aged 2 years. The male to female ratio in this age group was 1.5:1. For all of these rubella notifications the immunisation status was recorded as unknown, but cases under 1 year are age-ineligible for vaccination . Of concern females predominated (4, 80%) amongst those aged 15 to 39 years.

Pertussis cases for April 2000 (124) had decreased when compared with March 2000 (208) and the mean of the last 5 years (331). Pertussis notifications were most frequent in NSW (44%), Victoria (19%) and Queensland (17%). Cases of pertussis occurred in all age groups with peaks in the 0-4 (11), 10-19 (31) and 40-49 (23) years age ranges, with an overall male to female ratio of 0.9:1 (Figure 1). Immunisation status was reported for 11% of all pertussis notifications.

A total of 38 reports of meningococcal infection were received for April 2000, higher than the number of notifications for March 2000 (25), for April last year (33), and for the mean of the last 5 years (27). Most meningococcal cases were from NSW (39%), Victoria (29%) and Western Australia (18%). Meningococcal notifications were most frequent in those under 30 years of age with a predominance in the 0-4 and 15-24 years age ranges. The overall male to female ratio was 1.3:1. Serotype information was provided for 34% (13/38) of cases. Forty-six percent were serotype B and 54% were serotype C.

Figure 1. Notifications of pertussis, April 2000, by age group and sex



Vectorborne diseases

There were 14 notifications for dengue in April 2000, which was a decrease from March 2000 (33), but an increase from April last year (7) and the mean of the last 5 years (13). The majority of cases were from the Northern Territory (71%, all imported). A total of 167 notifications of dengue were received for the year to date 2000. This was an increase from the year to date mean of the last 5 years (85).

There were 422 notifications of Ross River virus infection in April 2000, which was a decrease from March 2000 (748), from April last year (804) and the mean of the last 5 years (854). The notifications decreased for all States and Territories in April 2000, except for the Northern Territory which reported 15 cases in this period compared with 7 cases in March 2000. The majority of notifications were still from Queensland (33%), Western Australia (21%) and NSW (20%). Forty-nine per cent of cases were aged 30 to 49 years. The male to female ratio was 1:1.

There were 59 notifications of malaria in April 2000, which was a decrease from March 2000 (93) and from the mean of the last 5 years (61), but an increase from April last year (50). The cases were due to *Plasmodium vivax* (33); *P. falciparum* (13); and 1*P. falciparum/P. vivax* co-infection. More than two thirds of the notifications were reported from Queensland (40) and all cases were imported. Seventy-five per cent of notifications were aged 20 to 44 years. The male to female ratio was 4.9:1.

There were 13 notifications of arbovirus infection (NEC) in April 2000, which was a decrease from March 2000 (15), but an increase from April last year (4) and the mean of the last 5 years (6). Most cases were reported from Victoria (46%), the Northern Territory (31%), Western Australia (15%) and Queensland (8%). Eight cases of Murray Valley Encephalitis were reported from Western Australia including 2 cases with onset dates in May 2000. There was one case in a male aged under 1 year with the remainder of the cases aged from 30 to 69 years. The male to female ratio was 3:1.

Other diseases

There were 124 notifications of legionellosis in April 2000, which was an increase from March 2000 (28), from April last year (22) and from the mean of the last 5 years (20).

The ages ranged from 25 to 89 years with a male to female ratio of 1.7:1 (Figure 2). Of these notifications 109 (88%) were due to *L. pneumophila* , 13 (10%) *L. longbeachae*, and 2 (2%) unknown/other (Figure 3).

A total of 207 notifications of legionellosis were received for the year to date 2000. This was an increase from the year to date mean of the last 5 years (78). The majority of the cases notified in April 2000 and for the year to date 2000 were associated with outbreaks in Victoria (87%) (Figures 4 and 5). This included the outbreak at Melbourne Aquarium, which was briefly discussed in *CDI* in April 2000 .

Figure 2. Notifications of legionellosis, April 2000, by age group and sex

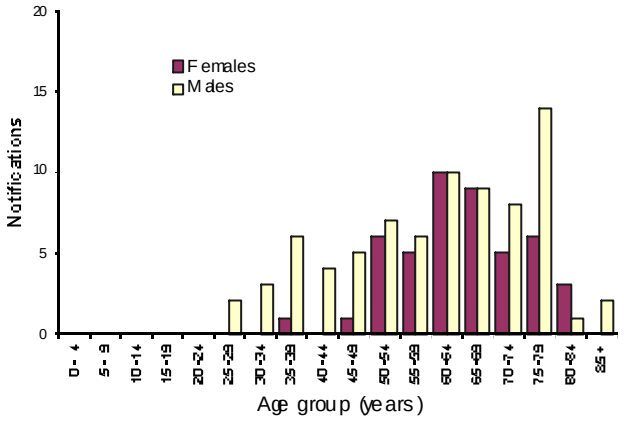


Figure 3. Notifications of legionellosis, January to April 2000, by serogroup

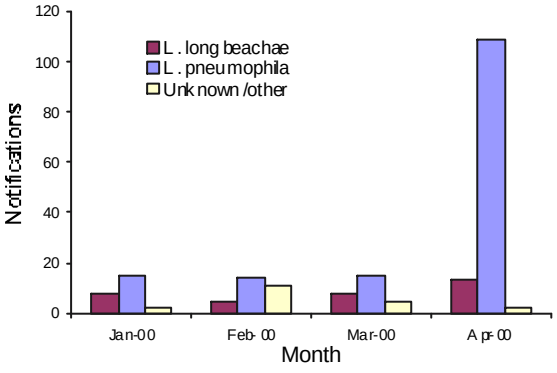


Figure 4. Notifications of legionellosis, 1991 to April 2000, Victoria and Australia, by month of notification

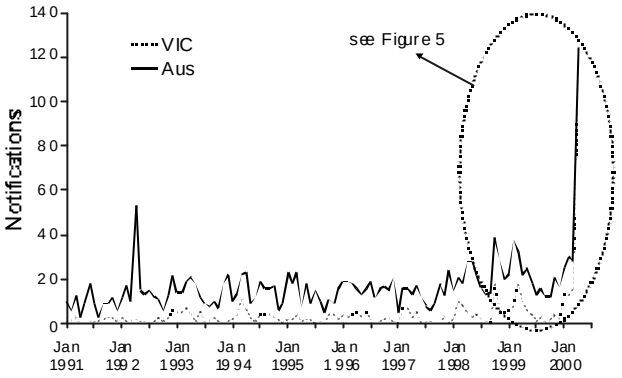
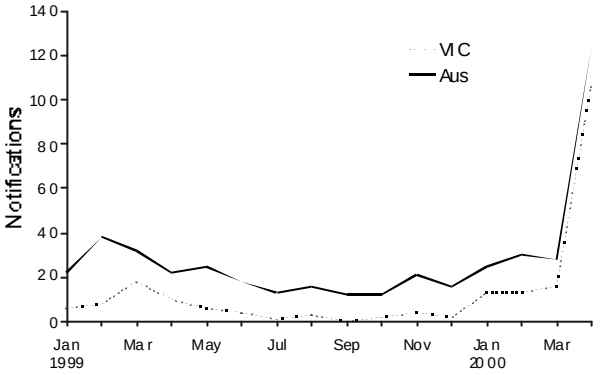


Figure 5. Notifications of legionellosis, January 1999 to April 2000, by month of notification

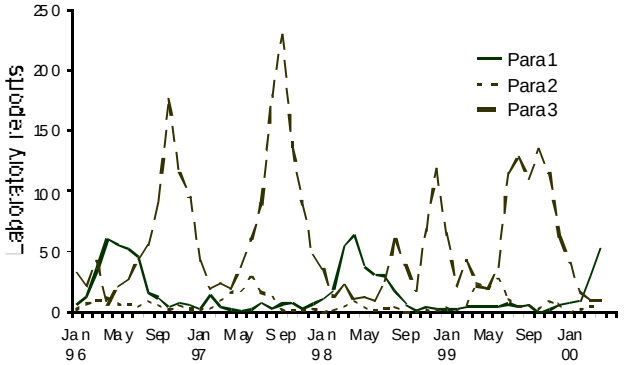


Parainfluenza viruses

The Virology and Serology Laboratory Reporting Scheme (LabVISE) is a voluntary scheme that receives reports from sentinel laboratories around Australia. LabVISE reports showed an outbreak of respiratory illness due to parainfluenza type 1. The outbreak commenced in March 2000 and has continued throughout April. Reports of parainfluenza type 2 are low compared with the same period in 1999 and reports of parainfluenza type 3 are dropping after an outbreak that peaked in late winter and early spring 1999. Ninety-three per cent of parainfluenza type 1 reports were in children in the 0-4 years age group. More males than females were affected, with a male to female ratio of 1.25:1.

Historical data recorded by LabVISE show that outbreaks of parainfluenza virus type 2 and parainfluenza virus type 1 occur in the autumn months of alternate years. The last recorded outbreak of parainfluenza type 1 occurred in autumn 1998. By contrast Australia has recorded outbreaks of parainfluenza type 3 each year during winter and early spring. (Figure 6).

Figure 6. Parainfluenza virus laboratory reports, 1996-2000, by type and month of specimen collection



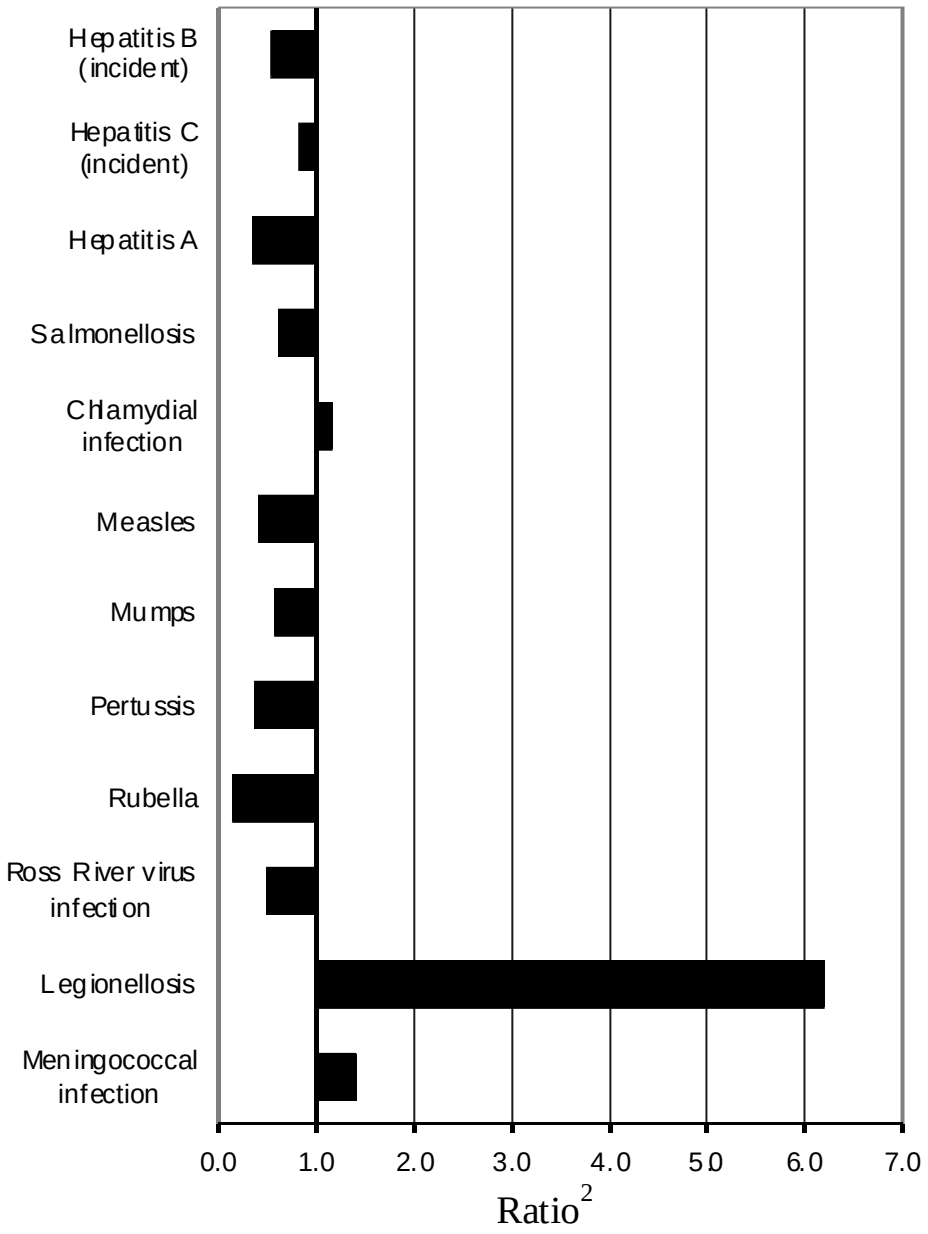
Tables

There were 5,500 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification date in April 2000 (Table 1). Data by date of report for weeks 13 to 17 ending 30 April 2000, are included in this issue of *CDI* (Table 2). The number of reports for selected diseases[1] have been compared with a 5 year mean, calculated using March to May data for the previous 5 years* (Figure 7).

There were 1,138 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the reporting period, 1 to 30 April 2000 (Tables 3 and 4).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 13 to 17, ending 30 April 2000, are included in this issue of *CDI* (Table 5).

Figure 7. Selected[1] diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 to 30 April 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 last 5 years as defined above*

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

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total April 2000[1]	Total March 2000[1]	Total April 1999[1]	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Bloodborne															
Hepatitis B (incident)	1	6	1	1	1	0	0	3	13	27	24	24	91	99	0.5
Hepatitis B (unspecified)[2]	1	75	0	53	0	4	163	46	342	661	607	607	2,304	2,305	0.6
Hepatitis C (incident)	2	3	0	-	0	1	3	6	15	32	37	28	112	69	0.8
Hepatitis C (unspecified)[2]	10	372	6	230	42	16	440	102	1,218	1,983	1,745	1,375	7,082	5,161	0.9
Hepatitis D	0	1	0	1	0	0	1	0	3	3	2	2	6	6	1.5
Gastrointestinal															
Botulism	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.0
Campylobacterosis[3]	14	-	8	269	121	20	336	133	901	1,025	861	901	4,098	3,814	1.0
Haemolytic uraemic syndrome	NN	1	0	0	0	0	NN	0	1	3	1	2	6	3	0.5
Hepatitis A	0	11	3	8	8	0	15	20	65	82	112	186	376	910	0.3
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0.0
Listeriosis	0	1	0	2	1	0	1	2	7	8	3	5	32	26	1.4
Salmonellosis	4	55	19	154	37	12	82	81	444	711	741	715	2,503	3,149	0.6
Shigellosis[3]	1	-	13	14	1	1	1	10	41	41	63	62	172	273	0.7
SLTEC,VTEC[4]	NN	0	0	NN	3	0	0	NN	3	4	3	2	16	5	1.5
Typhoid	0	3	0	0	0	0	0	1	4	7	3	3	26	36	0.7
Yersiniosis[3]	0	-	0	3	0	0	1	0	4	12	10	19	33	102	0.2
Quarantinable															
Cholera	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.0
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Yellow Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Sexually transmissible															
Chancroid	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.0
Chlamydial infection[5]	28	127	67	238	53	19	250	142	984	1,412	1,242	851	4,864	3,300	1.2
Donovanosis	0	0	0	1	NN	0	0	0	1	1	1	3	7	17	0.3
Gonococcal infection[6]	1	38	33	79	12	1	69	92	385	536	517	423	1,905	1,613	0.9
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.0
Syphilis[7]	0	24	6	35	0	0	0	3	98	169	169	149	531	577	0.7

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

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total April 2000[1]	Total March 2000[1]	Total April 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	na
Haemophilus influenzae type b	0	0	0	2	0	0	0	0	2	1	5	4	5	17	0.5
Measles	0	4	0	1	6	1	6	2	20	11	25	40	53	218	0.4
Mumps	0	4	0	0	0	0	'	3	8	16	23	'4	57	53	0.6
Pertussis	5	54	0	21	8	12	24	0	124	208	205	331	1,019	1,698	0.4
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Rubella[8]	0	1	0	7	0	0	7	0	15	11	26	102	61	495	0.1
Tetanus	0	0	0	0	0	0	0	0	0	1	0	1	3	2	0.0
Vectorborne															
Arbovirus infection NEC	0	0	4	1	0	0	6	2	13	15	4	3	40	34	2.2
Barmah Forest virus infection	0	9	2	28	0	0	2	2	43	66	109	101	222	366	0.4
Dengue	0	1	10	2	0	0	0	1	14	33	7	'3	167	85	1.1
Malaria	2	2	2	40	4	1	3	5	59	93	50	61	316	307	1.0
Ross River virus infection	1	85	15	'39	38	2	52	90	422	748	804	854	2,378	3,512	0.5
Zoonoses															
Brucellosis	0	0	0	0	0	0	0	0	0	3	0	3	5	10	0.0
Hydatid infection	0	NN	0	0	1	0	'	0	2	5	2	3	14	10	0.7
Leptospirosis	0	1	0	10	0	0	0	0	11	37	56	22	78	77	0.5
Ornithosis	0	NN	0	NN	1	0	'	0	2	8	12	7	21	27	0.3
Q Fever	0	4	0	32	0	0	3	0	39	60	37	46	182	165	0.8
Other															
Legionellosis	0	6	0	2	3	2	108	3	124	28	22	20	207	76	6.2
Leprosy	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0.0
Meningococcal infection	0	15	0	2	3	0	1'	7	38	25	33	27	130	94	1.4
Tuberculosis	0	5	1	1	0	0	22	3	32	76	57	82	264	331	0.4
Total	70	908	250	1466	343	92	1,612	759	5,500	7,186	7,868	7,043	29,389	29,045	

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.

na Not applicable.

* Ratio = ratio of current month total to mean of last 5 years calculated as described above.

Table 2. Notifications of diseases received by State and Territory health authorities for weeks 13 to 17, by date of report,* April 2000

Week number	13	14	15	16	17	Year to
Week ending on	2 April 2000	9 April 2000	16 April 2000	23 April 2000	30 April2000	date total
Disease[1]						
Bloodborne						
Hepatitis B (incident)	3	4	7	6	1	103
Hepatitis B (unspecified)[2]	137	131	134	108	80	2,533
Hepatitis C (incident)	13	8	6	6	2	128
Hepatitis C (unspecified)[2]	524	419	517	313	222	7,484
Hepatitis D	0	1	1	0	1	5
Gastrointestinal						0
Botulism	0	0	0	0	0	0
Campylobacterosis[3]	227	231	257	187	214	4,166
Haemolytic uraemic syndrome	0	1	0	1	0	5
Hepatitis A	22	17	14	18	20	396
Hepatitis E	0	0	0	0	0	0
Listeriosis	3	4	1	1	2	31
Salmonellosis	169	144	149	103	88	2,587
Shigellosis[3]	16	4	5	11	13	164
SLTEC,VTEC[4]	1	0	1	0	0	17
Typhoid	3	0	1	1	1	30
Yersiniosis[3]	3	4	0	1	0	33
Quarantinable						0
Cholera	0	0	0	0	0	1
Plague	0	0	0	0	0	0
Rabies	0	0	0	0	0	0
Viral haemorrhagic fever	0	0	0	0	0	0
Yellow Fever	0	0	0	0	0	0
Sexually transmissible						0
Chancroid	0	0	0	0	0	0
Chlamydial infection[5]	338	267	350	270	218	5,027
Donovanosis	0	0	0	1	0	8
Gonococcal infection[6]	153	102	133	90	101	1,947
Lymphogranuloma venereum	0	0	0	0	0	0
Syphilis[7]	38	31	37	25	18	579
Vaccine preventable						0
Diphtheria	0	0	0	0	0	0
Haemophilus influenzae type b	1	0	0	1	0	5
Measles	2	4	9	3	4	52
Mumps	3	7	4	4	0	61
Pertussis	53	45	44	55	19	1,228
Poliomyelitis	0	0	0	0	0	0
Rubella[8]	4	4	5	1	5	63
Tetanus	1	0	0	0	0	4
Vectorborne						0
Arbovirus infection NEC	6	0	5	3	4	34
Barmah Forest virus infection	17	8	12	21	6	231
Dengue	7	1	9	4	8	173
Malaria	23	28	9	17	9	314
Ross River virus infection	172	164	157	145	93	2,444

Table 2. Notifications of diseases received by State and Territory health authorities for weeks 13 to 17, by date of report,* April 2000 (continued)

Week number	13	14	15	16	17	Year to
Week ending on	2 April 2000	9 April 2000	16 April 2000	23 April 2000	30 April2000	date total
Disease[1]						
Zoonoses						0
Brucellosis	0	0	1	1	0	6
Hydatid infection	2	0	1	1	0	14
Leptospirosis	9	6	7	9	4	86
Ornithosis	3	2	3	1	1	31
Q Fever	19	13	11	14	4	195
Other						0
Legionellosis	5	7	7	8	49	154
Leprosy	0	0	0	0	0	0
Meningococcal infection	7	6	14	3	14	137
Tuberculosis	25	20	15	13	17	342
Total	2,009	1,683	1,926	1446	1218	30,818

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 3. Virology and serology laboratory reports by contributing laboratories for the reporting period 1 to 30 April 2000 [1]

State or Territory	Laboratory	This period	Total this period[2]
Australian Capital Territory	The Canberra Hospital	0	0
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	69	200
	New Children's Hospital, Westmead	62	67
New South Wales	Repatriation General Hospital, Concord	0	0
	Royal Prince Alfred Hospital, Camperdown	22	11
	South West Area Pathology Service, Liverpool	0	0
Queensland	Queensland Medical Laboratory, West End	366	333
	Townsville General Hospital	0	0
South Australia	Institute of Medical and Veterinary Science, Adelaide	351	365
Tasmania	Northern Tasmanian Pathology Service, Launceston	7	12
	Royal Hobart Hospital, Hobart	0	0
Victoria	Monash Medical Centre, Melbourne	0	3
	Royal Children's Hospital, Melbourne	51	101
	Victorian Infectious Diseases Reference Laboratory, Fairfield	161	238
Western Australia	PathCentre Virology, Perth	0	0
	Princess Margaret Hospital, Perth	49	0
	Western Diagnostic Pathology	0	0
Total		1,138	1,330

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.

Table 4. Virology and serology laboratory reports by State or Territory[1] for the reporting period 1 to 30 April 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	0	0	0	0	3	0	0	0	3	32	15	117
Mumps virus	0	0	0	0	1	0	0	0	1	6	22	21
Rubella virus	0	0	0	3	0	0	0	0	3	9	16	29
Hepatitis viruses												
Hepatitis A virus	0	0	0	2	4	0	0	0	6	30	55	146
Hepatitis D virus	0	0	0	1	0	0	0	0	1	1	2	3
Arboviruses												
Ross River virus	0	4	5	43	62	1	1	0	116	201	642	793
Barmah Forest virus	0	0	1	17	0	0	0	0	18	31	79	75
Flavivirus (unspecified)	0	0	0	2	0	1	0	0	3		34	16
Adenoviruses												
Adenovirus type 3	0	0	0	0	1	0	0	0	1	4	10	12
Adenovirus type 37	0	0	0	0	0	0	2	0	2	1	3	8
Adenovirus not typed/pending	0	8	0	0	28	1	11	5	53	106	312	355
Herpes viruses												
Cytomegalovirus	1	11	0	13	25	2	16	1	69	95	383	411
Varicella-zoster virus	1	4	0	25	17	1	9	0	57	126	458	559
Epstein-Barr virus	0	5	0	63	71	0	4	0	143	125	679	798
Other DNA viruses												
Parvovirus	0	0	0	0	1	0	1	0	2	36	87	131
Picorna virus family												
Echovirus type 7	0	1	0	0	0	0	0	0	1		3	1
Echovirus type 11	0	2	0	0	0	0	0	0	2	12	6	48
Echovirus type 30	0	1	0	0	0	0	1	0	2		66	6
Poliovirus type 3 (uncharacterised)	0	1	0	0	0	0	0	0	1	1	2	2
Rhinovirus (all types)	0	17	0	0	1	0	1	0	19	23	104	107
Enterovirus not typed/pending	0	3	0	6	0	0	115	0	124	62	406	258
Ortho/paramyxoviruses												
Influenza A virus	2	1	0	1	28	0	1	0	33	44	213	160
Influenza B virus	0	0	0	0	6	0	0	0	6	15	31	43
Parainfluenza virus type 1	0	15	0	2	12	0	3	21	53	4	100	13
Parainfluenza virus type 2	0	0	0	0	3	0	1	0	4	24	10	36
Parainfluenza virus type 3	0	0	0	0	9	0	1	0	10	22	77	151
Respiratory syncytial virus	0	38	0	9	10	1	19	16	93	116	316	328
Other RNA viruses												
Rotavirus	0	7	0	0	8	0	1	0	16	58	139	214
Norwalk agent	0	0	0	0	0	0	1	0	1	5	2	17
Other												
Chlamydia trachomatis not typed	6	39	14	54	42	2	12	5	174	242	1,001	996
Chlamydia psittaci	0	0	0	0	0	1	1	0	2	15	26	28
Mycoplasma pneumoniae	0	0	1	14	11	0	1	0	27	84	175	368
Mycoplasma hominis	0	1	0	0	0	0	0	0	1		1	4
Rickettsia australis	0	0	0	0	0	0	1	0	1		1	1
Streptococcus group A	0	2	5	20	0	0	0	0	27	2	136	2
Brucella species	0	1	0	0	0	0	0	0	1		4	2
Bordetella pertussis	0	2	0	3	5	0	3	0	13	26	178	197
Legionella pneumophila	0	0	0	0	0	0	1	0	1		3	12

Table 4. Virology and serology laboratory reports by State or Territory[1] for the reporting period 1 to 30 April 2000, and total reports for the year[2] (continued)

	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 longbeachae	0	0	0	0	1	0	0	0	1	1	17	14
Legionella species	0	0	0	0	0	0	1	0	1		1	
Cryptococcus species	0	0	0	0	1	0	0	0	1	2	2	6
Leptospira species	0	0	0	5	0	0	0	0	5		14	
Treponema pallidum	0	1	15	21	0	0	0	0	37	2	166	8
Toxoplasma gondii	0	1	0	0	0	0	0	0	1	1	4	4
Echinococcus granulosus	0	0	0	0	1	1	0	0	2		5	
Total	10	165	41	304	351	11	208	48	1,138	1,564	6,006	6,500

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 5. Australian Sentinel Practice Research Network reports, weeks 13 to 17, 2000

Week number	13		14		15	
Week ending on	2 April 2000		9 April 2000		16 April 2000	
Doctors reporting	72		73		77	
Total encounters	9,119		9,272		9,691	
Condition	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	34	3.7	34	3.7	42	4.3
Chickenpox	5	0.5	14	1.5	9	0.9
Gastroenteritis	68	7.5	92	9.9	92	9.5
Gastroenteritis with stool culture	12	1.3	17	1.8	17	1.8
ADT immunisations	66	7.2	50	5.4	51	5.3

Table 5. Australian Sentinel Practice Research Network reports, weeks 13 to 17, 2000, (continued)

Week number	16		17	
Week ending on	23 April 2000		30 April 2000	
Doctors reporting	70		64	
Total encounters	7,617		5,834	
Condition	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	31	4.1	33	5.7
Chickenpox	9	1.2	14	2.4
Gastroenteritis	76	10.0	56	9.6
Gastroenteritis with stool culture	13	1.7	12	2.1
ADT immunisations	51	6.7	19	3.3

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The system coordinates the national surveillance of more than 40 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 CDI 2000;24:6.

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 every four weeks. 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 CDI 2000;24:10.

ASPREN currently comprises about 120 general practitioners from throughout the country. Between 7,000 and 8,000 consultations are reported each week, with special attention to 14 conditions chosen for sentinel surveillance in 2000. CDI reports the consultation rates for five of these. For further information, including case definitions, see CDI 2000;24:7-8.

Additional Reports

National Influenza Surveillance, 2000

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. For further information about these schemes, see CDI 2000;24:9-10.

Sentinel general practitioner surveillance

Reports of influenza-like illness consultations for April 2000 and the earlier part of the year 2000 were available from the Northern Territory and ASPREN surveillance schemes. Victorian and New South Wales sentinel schemes resumed in May 2000.

The Northern Territory showed a characteristic early peak of 20.1 per 1,000 influenza-like illness consultations in late February. There were 20 influenza-like illness consultations in April 2000, a decrease from March 2000 (29) and April last year (110). Influenza-like illness consultation rates from January to April 2000, were 6.6 per 1,000 consultations (97 cases), less than for the same period last year (15.0 per 1,000) (Figure 8).

ASPREN recorded a peak of 5.5 per 1,000 consultations for influenza-like illness by the end of April 2000, greater than for the same period last year (3.5 per 1,000) and an increase from the beginning of the year (1.8 per 1,000) (Figure 8). The age distribution of influenza-like illness consultations reported by ASPREN for January to April 2000 is shown in Figure 9. Most influenza-like illness consultations occurred in the 15 to 44 years age range. (190, 57%). Forty-one (12%) cases were in children under 5 years of age and 14 (4%) in the 65+ years age range (Figure 9). The male to female ratio was 1:1 (172:163). The age distribution pattern for April 2000 was the same as for January to April 2000. However, there were more influenza-like illness consultations for females than males (male to female ratio 1:1.3).

Figure 8. Sentinel general practitioner influenza consultations rates, week 18 1999 to week 17 2000, by scheme

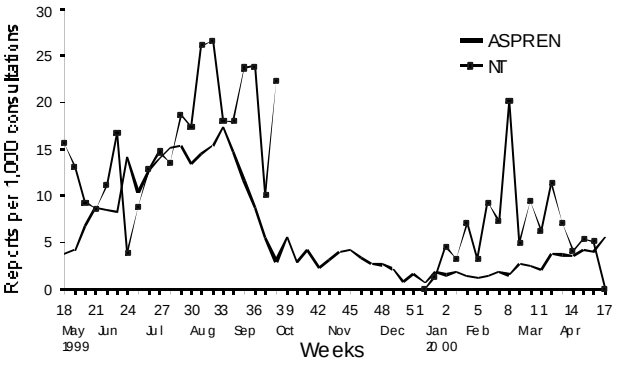
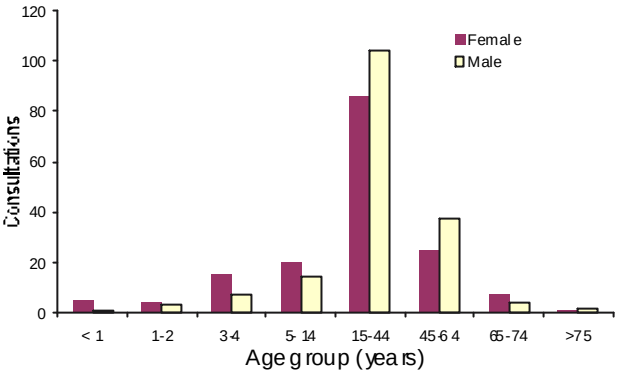


Figure 9. ASPREN influenza-like illness consultation, January to April 2000, by age group and sex



Laboratory Surveillance

LabVISE collects surveillance data all year. There were 244 laboratory reports of influenza virus isolation from January to April 2000. Of these, 213 (87%) were influenza A virus and 31 (13%) were influenza B virus (Figure 10). This was an increase from the same period last year (208 isolations), and comparable with the consultation rate for influenza-like illness for ASPREN. The number of

Figure 10. Laboratory reports of influenza, 2000, by type and week of specimen collection

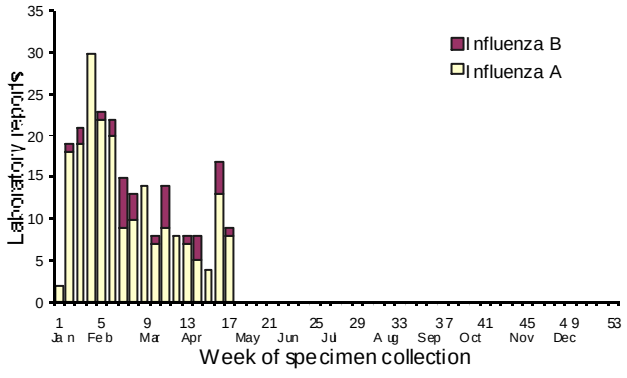


Figure 11. Laboratory reports of influenza, 1999 to 2000, by month of specimen collection

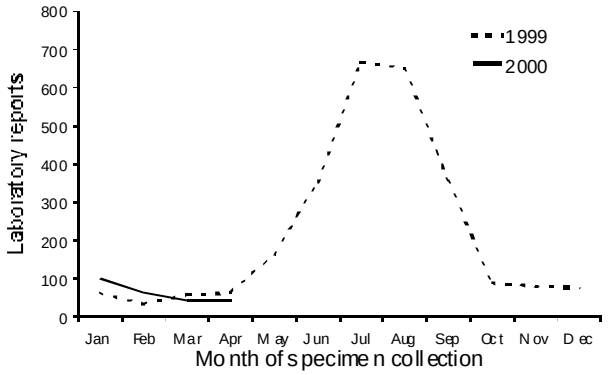
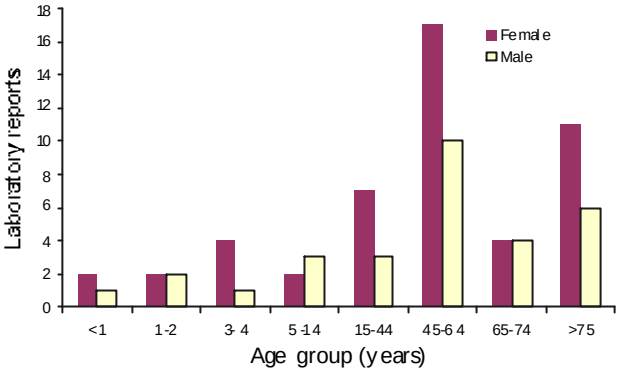


Figure 12. Laboratory reports of influenza, 2000, by age group and sex

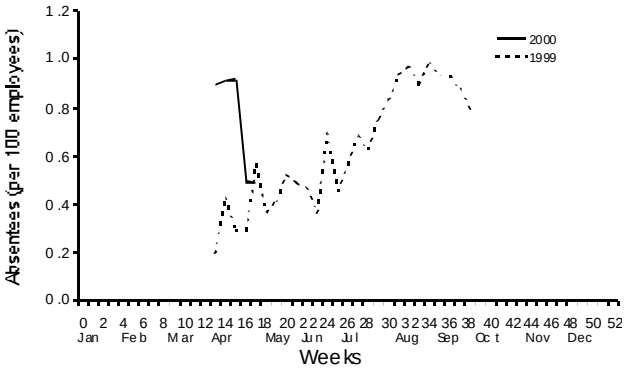


nfluenza reports from LabVISE was higher between mid-January and the end of February 2000 than for the corresponding period in 1999. From the end of February 2000 the number of reports returned to a similar level to that seen in 1999 (Figure 11). Specifically for April 2000, there were 39 influenza reports, a decrease from March 2000 (42) and April last year (61). Of these, 33 were influenza A virus and 6 were influenza B virus. Age information was only available for 32% of the 244 reports with a peak in the 45 to 64 years age range (27; 34%). There were 12 (15%) reports in children under 5 years of age and 25 (32%) in the 65+ years age range, with a male to female ratio of 1:1.6 (Figure 12).

Absenteeism surveillance

Australia Post reports employees absent if they are not at work for 3 or more consecutive days in 1 week. The weekly rates for April peaked in the 2 week period coinciding with Easter (0.9%) and then declined to 0.5% later in April. Average weekly absenteeism rates for April were 0.8%, more than double the average rate for April 1999 (0.3%) (Figure 13). The increase in weekly absenteeism rate for April was not reflected in the corresponding trends in influenza-like illness consultations and laboratory reports.

Figure 13. Absenteeism rates in Australia Post, 2000



Sentinel 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 virus which cause the potentially fatal disease Australian encephalitis in humans. Currently 28 flocks are maintained in the north of Western Australia, seven 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 see CDI 2000;24:8-9.

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Sentinel chicken serology was carried out for 26 of the 28 flocks in Western Australia in March and April 2000. Widespread activity was detected in the Kimberley, Pilbara, Gascoyne and Murchison regions in March and April 2000 and at one site in the Mid-West during April. The number of chickens positive for flavivirus antibodies by ELISA at each site and the identity of the infecting virus(es) are shown in Table 6. A number of the later seroconversions have not yet been confirmed.

These high levels of MVE virus activity have occurred as a result of high wet season rainfall in the Kimberley region and high cyclonic rains and extensive flooding in the Pilbara, Gascoyne and Murchison regions. MVE virus antibodies were detected in 3, possibly 4, chickens in the Dongara flock (Mid-West) in late April. This is the furthest south the virus has ever been detected. A survey to determine MVE antibody levels in domestic chickens located in this region and areas further south is being carried out to determine the southern limit of MVE virus activity in Western Australia.

A number of media warnings have been issued by the Health Department of Western Australia to warn residents living in the northern areas of Western Australia of the increased risk of disease. Additional warnings were also sent out by the Regional Public Health Units to Aboriginal communities in the regions.

Table 6. Flavivirus seroconversions in Western Australian sentinel chicken flocks in March and April 2000

	March 2000			April 2000		
Location	MVE	MVE/KUN	KUN	MVE	MVE/KUN	KUN
Kimberley						
Wyndham			2			
Kununurra		1		1		1
Halls Creek	1	2	1	4		
Fitzroy Crossing	2			1	1	
Derby*				3#	5#	
Pilbara						
Port Hedland*	3			2	1#	4#
Karratha	4			3#		
Harding Dam*	2	4		8	1	
Marble Bar	3	1		6#	1#	
Pannawonica	3	2		3	1	
Tom Price	1			3#		
Paraburdoo	1					
Onslow	3					
Ophthalmia Dam	2	6				
Newman	1			4		
Exmouth				1	1	
Gascoyne						
Carnarvon		1		2#		
Murchison						
Meekatharra	1					
Mid-West						
Dongara				2#	2	

* 2 flocks of 12 chickens at these sites.

\# Some of these results have not yet been confirmed.

MVE Antibodies to Murray Valley encephalitis virus detected by ELISA.

KUN Antibodies to Kunjin virus detected by ELISA.

Table 7. Flavivirus seroconversions in Northern Territory sentinel chicken flocks in March and April 2000

Location	March 2000			April 2000		
	MVE	MVE/KUN	KUN	MVE	MVE/KUN	KUN
Alice Springs	3#					
Leanyer				1		2
Tennant Creek	1	1	1			3
Katherine				1		

* 2 flocks of 12 chickens at these sites.

\# Some of these results have not yet been confirmed.

MVE Antibodies to Murray Valley encephalitis virus detected by ELISA.

KUN Antibodies to Kunjin virus detected by ELISA.

Eight cases of Murray Valley Encephalitis were reported from Western Australia including 2 cases with onset dates in May 2000.

(It should also be noted that there are now 28 flocks in Western Australia as a new flock at the Curtain Air Base, south of Derby, has now been added to the program).

Serum samples from all seven of the Northern Territory sentinel chicken flocks were tested in the laboratory in March 2000 and from six flocks in April 2000. There were seroconversions to flaviviruses in the flocks located at Alice Springs and Tennant Creek in March and at Leanyer, Katherine and Tennant Creek in April. The number of chickens positive for flavivirus antibodies by ELISA at each site and the identity of the infecting virus(es) are shown in Table 7. A number of media warnings have been issued by the Northern Territory Health Department and to date there have been four cases of Australian encephalitis confirmed from central Australia.

There have been no seroconversions to flaviviruses in the NSW and Victorian sentinel chicken flocks over this period.

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 (ACT, 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. Telephone: (02) 9332 4648; Facsimile: (02) 9332 1837; http://www.med.unsw.edu.au/nchecr.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 to 31 December 1999, as reported to 31 March, are included in this issue of CDI (Tables 8 and 9).

Table 8. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 December 1999, by sex and State or Territory of diagnosis

										Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998
HIV diagnoses	Female	0	2	0	3	0	0	0	0	5	3	75	90
	Male	0	31	0	11	0	0	8	5	55	37	610	623
	Sex not reported	0	0	0	0	0	0	0	0	0	1	1	7
	Total[1]	0	33	0	14	0	0	8	5	60	41	686	720
AIDS diagnoses	Female	0	2	0	0	0	0	0	0	2	3	16	19
	Male	0	6	0	1	0	0	0	2	9	22	131	279
	Total[1]	0	8	0	1	0	0	0	2	11	26	147	299
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	0	4	8
	Male	1	0	0	0	1	1	0	3	11	98	146	135
	Total[1]	0	1	0	0	0	1	1	0	3	11	103	154

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

Table 9. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 December 1999, by sex and State or Territory

		State or Territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	26	603	11	148	61	6	212	113	1,180
	Male	220	10,792	108	1,965	672	79	3,872	907	18,615
	Sex not reported	0	253	0	0	0	0	24	0	277
	Total [1]	246	11,667	119	2,120	733	85	4,121	1,023	20,114
AIDS diagnoses	Female	8	184	0	47	25	3	68	26	361
	Male	86	4,630	36	817	345	44	1,603	347	7,908
	Total [1]	94	4,826	36	866	370	47	1,678	375	8,292
AIDS deaths	Female	3	113	0	31	15	2	48	16	228
	Male	65	3,167	24	564	230	29	1,267	246	5,592
	Total [1]	68	3,288	24	597	245	31	1,321	263	5,837

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