Further changes to presentation of NNDSS data

In the last issue an additional set of summary tables presenting data by date of onset for each calendar month was introduced for the National Notifiable Diseases Surveillance System. In this issue, a further refinement is introduced. From this issue on Table 1 will present '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. Data for February 2000, by date of notification, are presented in Table 1 of this issue and are discussed in the highlights section. Table 2 presents data by report date for weeks 5 to 8, ending 27 February 2000, 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 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 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.

Communicable Diseases Surveillance

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'.

Vaccine preventable diseases (VPDs)

A total of 297 notifications were received with a notification date in February. Notification numbers for the different VPDs overall remained stable and as noted in previous reports, most were the result of continuing pertussis activity in most States and Territories. There were no cases of diphtheria or *Haemophilus influenzae* type b. The number of mumps and rubella cases were stable. Most rubella cases occurred in males aged 20-24 years (Figure 1).

Pertussis cases in this period (255) had decreased when compared with January cases (380) and the five year mean (468), but was similar to February 1999 (260). The decrease in the number of cases was in New South Wales, Queensland and Tasmania. Cases of pertussis occurred in all age groups with peaks in those aged 10-14 years and those aged 40-44 years (Figure 2). There was a male to female ratio of 0.8:1. Immunisation status information was mostly provided for those aged 0-4 years. The majority of cases aged 0-4 years were described as partly immunised (Figure 2). For cases in the 10-14 year age group and 40-44 year age group immunisation status was mostly not provided. Of note amongst those aged 10-14 years, a small proportion of cases occurred in those fully immunised and a slightly greater proportion in those partly immunised.

Figure 1. Notifications of rubella, February 2000, by age group and sex

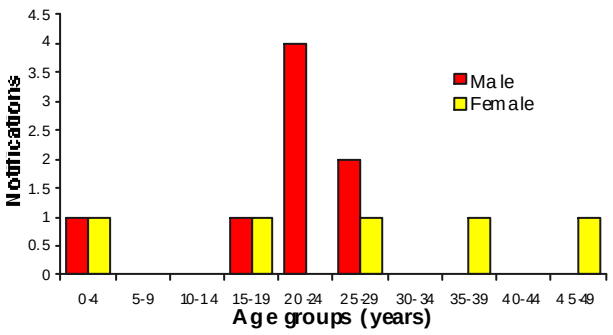
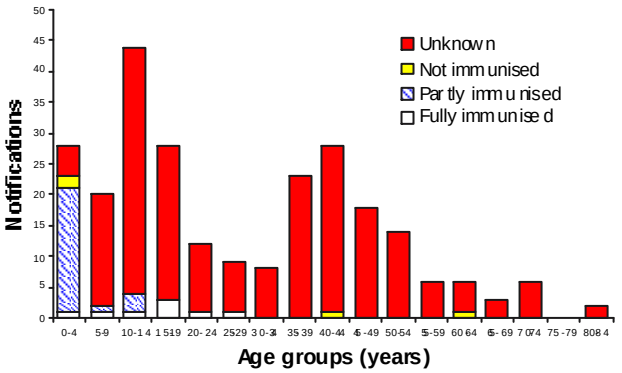


Figure 2. Notifications of pertussis, February 2000, by age group and immunisation status



A total of 24 reports of meningococcal disease were received with a notification date in February; similar to numbers from February last year (18) and the 5 year mean (22), but showing a decrease when compared with January (45). Most cases occurred in those under 30 years with a predominance in those aged 0-4 and 15-19 years. Overall the ratio of males to females was 1.2:1. Serotype information was provided for 63% (15/24) of cases. Of the 15 notifications for which serotype information was provided, the following was found: serotype B (n=6, 40%), serogroup C (n=7, 46%), serogroup Y (n=1, 7%) and serogroup W (n=1, 7%).

Bloodborne diseases

There were 1,949 notifications of hepatitis C diagnosed in February 2000 that were not already on the State and Territory notifiable diseases systems. This was an increase from January 2000 (1,520), February last year (1,862) and for the mean of the last 5 years (1,329). Of these, 25 were identified to be incident cases. The majority of the incident notifications were in the 15-29 year old age group (72%) and the male to female ratio was 1.3:1.

Gastrointestinal diseases

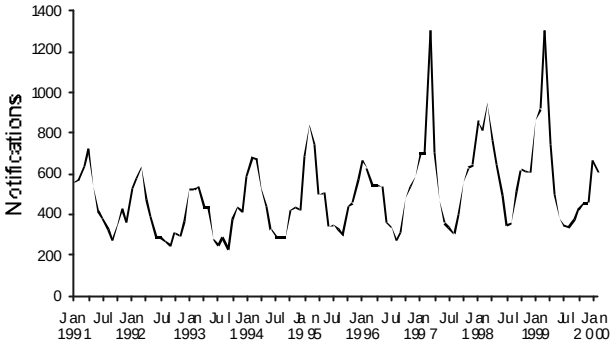
There were 609 notifications of salmonellosis with a notification month of February 2000. This was a decrease from January 2000 (666), February last year (917) and for the mean of the last 5 years (834) (Figure 3). Thirty-two percent (226 cases) were in the 0-5 year age group with an overall male to female ratio of 1:1.

There were 5 notifications of typhoid with a notification month of February 2000. Of the four States reporting SLTEC/VTEC there were 5 cases, all from South Australia. There was also 1 case of HUS in New South Wales.

Quarantinable diseases

From 1 January 1998 to 29 February 2000, a total of 8 cases of cholera have been reported to NNDSS (Box 1). There were 3 cases from New South Wales, 3 from Victoria, and 1 each from Queensland and South Australia. Cases were aged from 2 to 66 years with a male to female ratio of 1.3:1. One case of cholera was confirmed as a locally transmitted case, and the source of infection was unknown for another case in Victoria. The remainder of cases were acquired overseas. The detail of the source of infection and serotype are shown in Box 1.

Figure 3. Notifications of salmonellosis, January 1991 to February 2000, by date of notification



There were no cases of plague, rabies, yellow fever or viral haemorrhagic fever with a notification month of February 2000

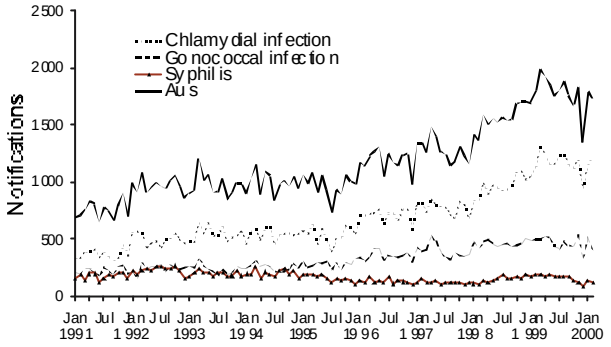
Sexually transmissible diseases (STDs)

There were 1,728 notifications of sexually transmissible diseases with a notification month of February 2000, which is similar to January 2000 (1,793) and February last year (1,804) but is less than the mean for the last 5 years (1,363) (Figure 4). The notifications were in all age groups with a male to female ratio of 2.5:1. The increase in notifications of sexually transmitted diseases is mainly due to the increased notifications for chlamydial infection. This, however, may only be a reflection of increased testing rather than disease incidence.

Box 1. Notifications of cholera, January 1998 to February 2000, by source of infection and serotype

Reporting State/Territory	Age	Sex	Date of notification	Date of report	Source of infection	Organism
NSW	66	M	29/01/98	9/02/98	Bali	01 - el tor - ogawa
Qld	25	F	2/03/98	10/03/98	Bali	01 - el tor - ogawa
Vic	41	M	13/05/98	15/05/98	Bali	01 - el tor - ogawa
Vic	38	M	25/09/98	9/10/98	UK	1
NSW	14	M	29/01/99	3/02/99	NSW	01 - el tor - ogawa
NSW	2	F	3/04/99	8/04/99	India	01 - el tor - ogawa
Vic	66	M	23/08/99	23/08/99	Jakarta	01 - ogawa
SA	40	F	28/02/00	9/03/00	Bali	139

Figure 4. Notifications of sexually transmissible diseases, January 1991 to February 2000, by date of notification, and disease



Vectorborne diseases

There were 49 notifications of dengue with a notification month of February 2000. This was the same as for January 2000 (49), but an increase from February last year (21) and for the mean for the last 5 years (25) (Figures 5 and 6). The notifications were in all age groups with a male to female ratio of 1:1. The increase was mainly in Queensland (31) and Northern Territory (14) due to both imported cases and local transmission in Queensland, and elsewhere from imported cases mainly from East Timor.

There were 548 notifications of Ross River virus infection with a notification month of February 2000, which was an increase from January 2000 (536) but was less than for February last year (668) and for the mean for the last 5 years (887). The majority of notifications were in Queensland and Western Australia (70%) and mainly in the 25-49 year age group (64%), with a male to female ratio of 0.8:1

There were 88 notifications of malaria with a notification month of February 2000, which was an increase from January 2000 (71) and for the mean for the last 5 years (82),

Figure 5. Notifications of dengue, January 1991 to February 2000, by date of notification

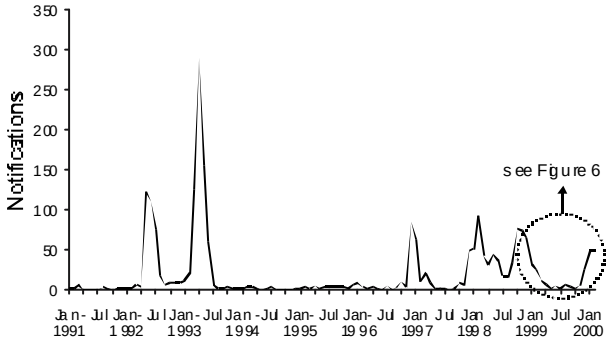


Figure 6. Notifications of dengue, January 1999 to February 2000, by date of notification

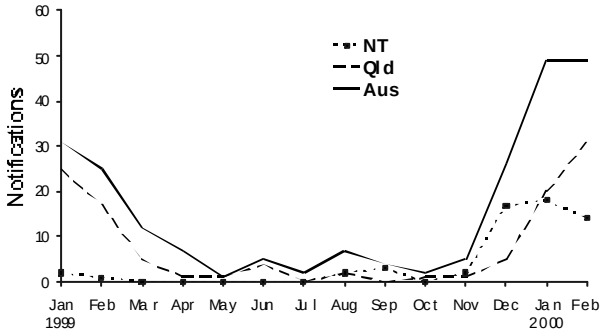


Figure 7. Notifications of malaria, January 1991 to February 2000, by date of notification

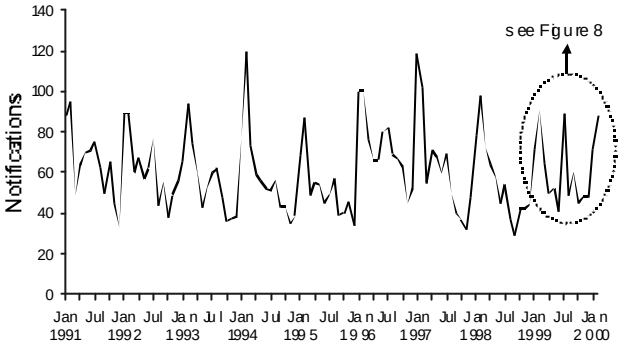
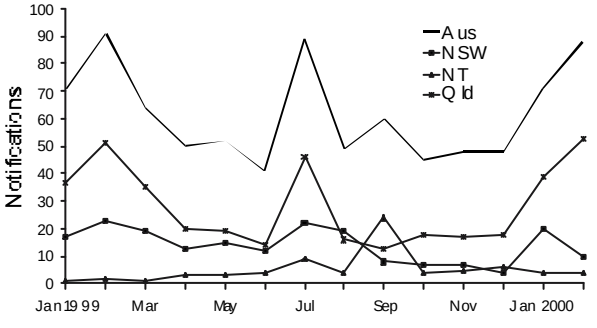


Figure 8. Notifications of malaria, January 1999 to February 2000, by date of notification



but was less than for February last year (91) (Figures 7 and 8). Of the cases, there were 55 from *P. vivax*, 22 *P. falciparum*, 2 *P. ovale* and 2 *P. malariae*. The majority of notifications were in Queensland (53) from returning service personnel from East Timor and from PNG students. The majority of notifications were in the 15-29 year age group (53%) with a male to female ratio of 3.3:1.

Other diseases

There were 33 notifications of legionellosis with a notification month of February 2000; the majority being in Victoria (60%). This was more than the notifications for January 2000 (17), and for the mean for the last 5 years (20) but was similar to February last year (38). The age for the notifications ranged from 25–79 years and the male to female ratio was 1.8:1. These cases were associated with an outbreak in Victoria.

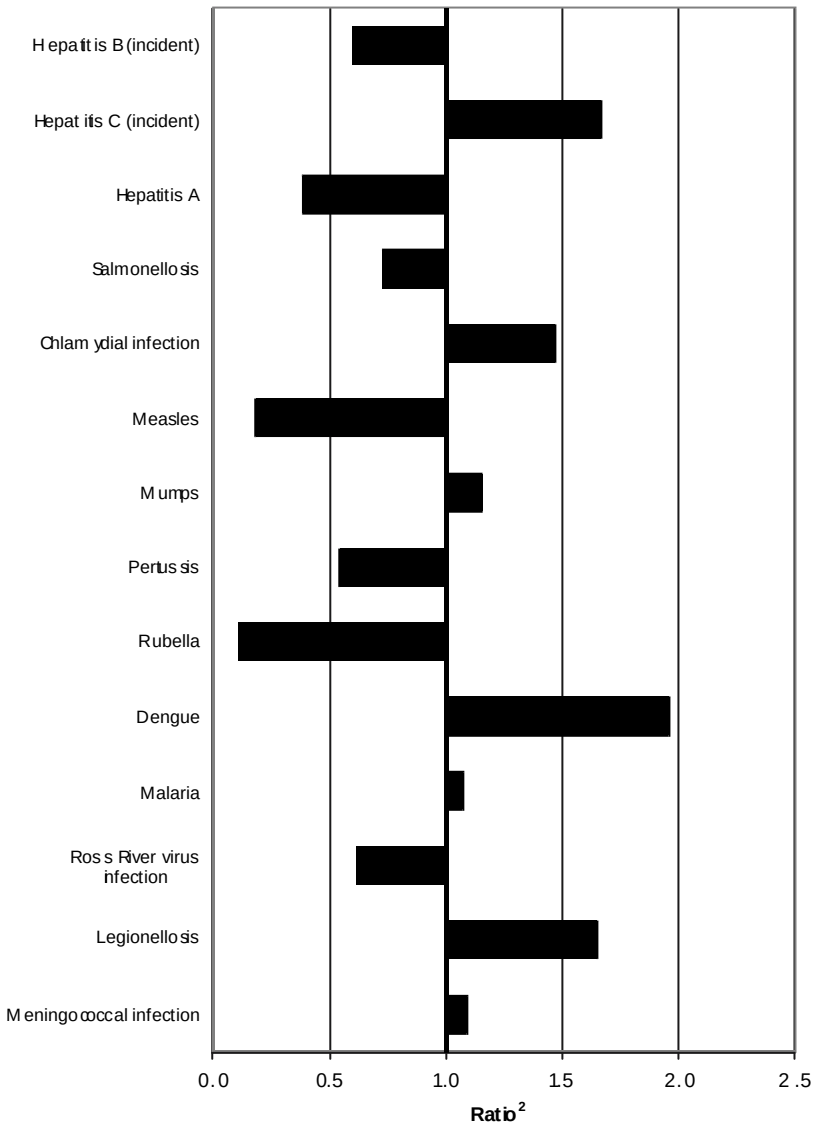
Tables

There were 7,075 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification date in February 2000 (Table 1). Data by date of report for weeks 5 to 8, ending 27 February 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 January to March data for the previous 5 years* (Figure 9).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 5 to 8, ending 27 February 2000, are included in this issue of *CDI* (Table 3).

As this is a supplementary issue, LabVISE tables are not included.

Figure 9. Selected[1] diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 to 29 February 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 29 February 2000, by date of notification

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total Feb 2000[1]	Total Jan 2000[1]	Total Feb 1999[1]	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Bloodborne															
Hepatitis B (incident)	0	5	0	6	0	1	2	1	15	27	26	25	42	51	0.6
Hepatitis B (unspecified)[2]	4	219	0	55	0	2	45	93	418	536	553	579	954	1,096	0.7
Hepatitis C (incident)	1	3	0	0	6	0	4	11	25	13	28	15	38	27	1.7
Hepatitis C (unspecified)[2]	21	650	4	277	41	37	751	143	1,924	1,507	1,862	1,314	3,431	2,579	1.5
Hepatitis D	0	0	0	0	0	0	0	0	0	0	1	2	0	3	-
Gastrointestinal															
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Campylobacterosis[3]	10		10	297	135	19	300	130	901	1,134	1,024	1,000	2,123	2,015	1.0
Haemolytic uraemic syndrome	0	1	0	0	0	0	0	0	1	1	7	2	2	2	0.5
Hepatitis A	0	13	5	24	6	0	19	27	94	124	178	245	218	535	0.4
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	2	0	1	-
Listeriosis	0	2	0	2	1	1	1	0	7	10	4	7	17	15	1.0
Salmonellosis	7	94	36	215	37	15	126	79	609	666	917	834	1,275	1,533	0.7
Shigellosis[3]	0	0	6	11	1	1	9	14	42	42	51	70	84	141	0.6
SLTEC,VTEC[4]	0	0	0	0	5	0	0	0	5	4	4	3	9	3	1.7
Typhoid	0	1	0	1	0	0	3	0	5	9	9	10	14	23	0.5
Yersiniosis[3]	0	0	0	5	3	0	1	0	9	9	13	18	18	62	0.3
Quarantinable															
Cholera	0	0	0	0	1	0	0	0	1	0	0	*	1	1	1.0
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	-
YellowFever	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	-
Chlamydial infection[5]	21	187	51	390	63	33	295	170	1,210	1,149	1,130	824	2,359	1,599	1.5
Donovanosis	0	0	0	0	0	0	0	0	0	5	0	5	5	11	-
Gonococcal infection[6]	0	72	71	79	14	0	73	99	408	511	492	368	919	770	1.1
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0	0	*	0	0	-
Syphilis[7]	1	41	10	54	0	0	0	4	110	128	182	146	238	281	0.8

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total Feb 2000[1]	Total Jan 2000[1]	Total Feb 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	-
Haemophilus influenzae type b	0	0	0	0	0	0	0	0	0	3	3	-	5	9	-
Measles	1	1	0	7	0	0	1	1	11	8	14	-	60	116	0.2
Mumps	1	2	1	0	2	0	3	6	15	12	9	-	13	25	1.2
Pertussis	5	77	0	42	17	29	83	2	255	392	260	-	468	1,036	0.5
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	-	0	0	-
Rubella[8]	0	6	0	4	1	0	4	0	15	17	23	-	133	295	0.1
Tetanus	0	0	0	0	1	0	0	0	1	1	0	-	1	1	1.0
Vectorborne															
Arbovirus infection NEC	0	0	0	0	0	0	7	0	7	2	7	2	10	19	0.7
Barmah Forest virus infection	0	24	1	27	0	0	3	5	60	51	60	51	89	143	0.7
Dengue	0	3	14	31	0	0	1	0	49	49	49	49	25	57	2.0
Malaria	0	10	4	53	3	1	16	1	88	71	88	71	82	183	1.1
Ross River virus infection	0	60	27	278	38	0	40	105	548	536	548	536	887	1,476	0.6
Zoonoses															
Brucellosis	0	0	0	0	0	0	0	0	0	2	1	3	2	7	-
Hydatid infection	0	0	0	2	0	0	1	0	4	2	1	2	6	4	2.0
Leptospirosis	0	1	0	4	0	0	2	0	7	20	28	18	27	31	0.4
Ornithosis	0	0	0	0	1	0	10	0	11	3	10	7	14	13	1.6
Q Fever	0	5	0	35	0	0	1	0	43	30	41	41	82	79	1.0
Other															
Legionellosis	0	0	0	5	5	0	20	3	33	17	38	20	50	39	1.7
Leprosy	0	0	0	0	0	0	0	0	0	0	0	2	0	2	-
Meningococcal infection	0	10	1	2	0	0	6	5	24	45	18	32	69	45	1.1
Tuberculosis	0	21	4	2	0	0	0	5	32	41	75	67	73	168	0.4
Total	80	1,508	245	1,908	381	139	1,907	907	7,075	7,186	7,868	7,478	14,261	14,499	

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

Table 2. Notifications of diseases received by State and Territory health authorities for weeks 5 to 8, by date of report*, February 2000

Week number	5	6	7	8	Year to
Week ending on	6 February 2000	13 February 2000	20 February 2000	27 February 2000	date
Disease[1]					
Bloodborne					
Hepatitis B (incident)	7	6	2	5	45
Hepatitis B (unspecified)[2]	132	97	140	80	977
Hepatitis C (incident)	8	7	4	9	49
Hepatitis C (unspecified)[2]	402	725	486	434	3,525
Hepatitis D	0	0	0	0	0
Gastrointestinal					
Botulism	0	0	0	0	0
Campylobacterosis[3]	217	271	276	247	2,081
Haemolytic uraemic syndrome	1	0	0	0	2
Hepatitis A	28	31	30	18	216
Hepatitis E	0	0	0	0	0
Listerosis	0	1	4	3	17
Salmonellosis	164	146	200	143	1,272
Shigellosis[3]	14	9	9	11	75
SLTEC,VTEC[4]	0	2	1	0	9
Typhoid	4	1	4	1	17
Yersiniosis[3]	0	3	3	1	16
Quarantinable					
Cholera	0	0	0	0	0
Plague	0	0	0	0	0
Rabies	0	0	0	0	0
Viral haemorrhagic fever	0	0	0	0	0
Yellow Fever	0	0	0	0	0
Sexually transmissible					
Chancroid	0	0	0	0	0
Chlamydial infection[5]	292	299	344	345	2,374
Donovanosis	1	0	0	0	3
Gonococcal infection[6]	114	109	128	115	928
Lymphogranuloma venereum	0	0	0	0	0
Syphilis[7]	48	33	25	42	275
Vaccine preventable					
Diphtheria	0	0	0	0	0
Haemophilus influenzae type b	1	0	1	0	4
Measles	3	1	4	3	18
Mumps	4	3	4	3	28
Pertussis	80	119	109	71	788
Poliomyelitis	0	0	0	0	0
Rubella[8]	2	2	2	4	32
Tetanus	0	2	0	0	2
Vectorborne					
Arbovirus infection NEC	0	0	0	4	6
Barmah Forest virus infection	13	20	14	20	107
Dengue	13	17	5	15	83
Malaria	24	33	17	22	149
Ross River virus infection	130	194	162	170	1,076

Table 2. Notifications of diseases received by State and Territory health authorities for weeks 5 to 8, by date of report*, February 2000 (continued)

Week number	5	6	7	8	Year to
Week ending on	6 February 2000	13 February 2000	20 February 2000	27 February 2000	date
Disease[1]					
Zoonoses					
Brucellosis	0	0	0	0	3
Hydatid infection	0	0	1	1	4
Leptospirosis	2	11	0	2	33
Ornithosis	1	1	7	1	14
Q Fever	10	14	12	16	94
Other					
Legionellosis	6	9	6	11	47
Leprosy	0	0	0	0	0
Meningococcal infection	11	6	8	2	75
Tuberculosis	17	19	13	17	117
Total	1,749	2191	2,021	1,816	14,561

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 number 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.

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

Table 3. Australian Sentinel Practice Research Network reports, weeks 5 to 8, 2000

Week number	5		6		7		8	
Week ending on	6 February 2000		13 February 2000		20 February 2000		27 February 2000	
Doctors reporting	65		66		69		62	
Total encounters	7,636		8,684		8,630		7,571	
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	10	1.3	13	1.5	16	1.9	12	1.6
Chickenpox	12	1.6	14	1.6	9	1.0	9	1.2
Gastroenteritis	65	8.5	95	10.9	79	9.2	77	10.2
Gastroenteritis with stool culture	17	2.2	14	1.6	13	1.5	7	0.9
ADT immunisations	44	5.8	64	7.4	76	8.8	61	8.1

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.

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

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 which cause the potentially fatal disease Australian encephalitis in humans. Currently 27 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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January/February 2000

Sentinel chicken serology was carried out for 25 of the 27 flocks in Western Australia in January and February 2000. The first MVE virus activity of the wet season was detected in both the Kimberley and Pilbara regions in January 2000. Seroconversions to MVE virus occurred in the Wyndham and Fitzroy Crossing flocks in the Kimberley region and at Paraburdoo in the Pilbara. There have been further seroconversions in February at Wyndham, Kununurra, Fitzroy Crossing and Broome in the Kimberley and Karratha, Harding Dam, Tom Price, Paraburdoo, Ophthalmia Dam and Newman in the Pilbara. 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 4 . A number of the later seroconversions have not yet been confirmed. Media warnings have been issued by the Health Department of Western Australia to warn residents in the Kimberley and Pilbara regions of the increased risk of disease. Additional warnings were also sent out by the Regional Public Health Units to Aboriginal communities in the region.

It should be noted that there are now only 27 flocks in Western Australia as the flock at Pardoo in the Pilbara is no longer part of the program.

Serum samples from all 7 of the 7 Northern Territory sentinel chicken flocks were tested in the laboratory in January 2000 and from 5 flocks in February 2000. There were 4 seroconversions to flaviviruses (3 to MVE and 1 to flavivirus only) in the Beatrice Hill Farm flock (east of Darwin) in February 2000.

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

Details of the locations of all chicken flocks are given in *CDI* 2000;24:8-9.

Table 4. Flavivirus seroconversions in Western Australian sentinel chicken flocks in January and February 2000

	January 2000			February 2000		
Location	**MVE**	**MVE/KUN**	**KUN**	**MVE**	**MVE/KUN**	**KUN**
Kimberley						
Wyndham	1					1#
Kununurra				2	1	1
Fitzroy Crossing	4			1		
Broome*				3#		
Pilbara						
Karratha				3#	1#	
Harding Dam*				1		
Tom Price				4		
Paraburdoo	4			1#	1#	
Ophthalmia Dam				2	1	
Newman				3		

* 2 flocks of 12 chickens at these sites

\# result not yet confirmed

MVE antibodies to Murray Valley encephalitis virus detected by ELISA

KUN antibodies to Kunjin virus detected by ELISA