Communicable Diseases Surveillance

Presentation of NNDSS data

In the March 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 1,666 notifications of hepatitis C reported in March 2000 that were not already on the State and Territory notifiable disease systems. This was a decrease from February 2000 (2,169), and March last year (1,952) but an increase from the mean of the last 5 years (1,324). Of these, 20 were identified to be incident cases. The majority of the incident notifications were in the 15-34 year old age group (95%) and the male to female ratio was 1:3.

Gastrointestinal diseases

There were 672 notifications of salmonellosis in March 2000. This was an increase from February 2000 (639), but a decrease from March last year (1,309) and the mean of the last 5 years (798) (Figure 1). Thirty-seven per cent (250 cases) were in the 0-5 year age group with an overall male to female ratio of 1:1.

There were 7 notifications of typhoid in March 2000. Of the 4 States reporting SLTEC/VTEC there were 4 cases, all from South Australia. There were also 2 cases of HUS in Victoria; both in the 0-4 year age group.

Quarantinable diseases

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

Sexually transmissible diseases (STDs)

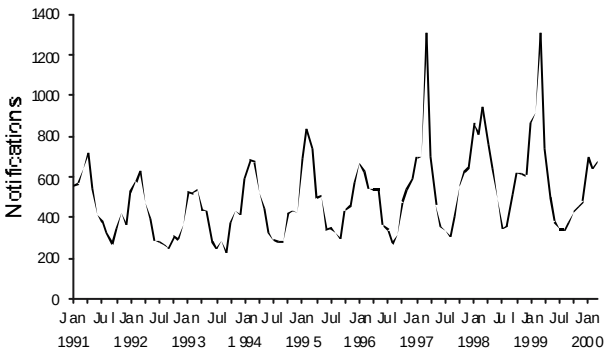
There were 1,889 notifications of sexually transmissible diseases in March 2000, which is similar to February 2000 (1,857) and March last year (1,982) but is greater than the mean for the last 5 years (1,393). The increase in notifications of sexually transmitted diseases again is mainly due to the increased notifications for chlamydial infection (ratio 1.5) and gonococcal infection (ratio 1.2).

Vectorborne diseases

There were 25 notifications of dengue in March 2000, which was a decrease from February 2000 (59), but an increase from March last year (14) and the mean for the last 5 years (18). The notifications were in all age groups with a male to female ratio of 1:1. The cases were mainly reported from Queensland (12) and Northern Territory (9) (Figure 2).

There were 602 notifications of Ross River virus infection in March 2000, which was a decrease from February 2000

Figure 1. Notifications of salmonellosis, January 1991 to March 2000, by date of notification



(624), from March last year (1,000) and the mean for the last 5 years (990). The majority of notifications were in Queensland (37%) and Western Australia (23%), and in the 25-49 year age group (63%) with a male to female ratio of 0.9:1.

There were 83 notifications of malaria in March 2000, which was a decrease from February 2000 (90) but an increase from March last year (64) and from the mean for the last 5 years (73) (Figure 3). The cases were due to the following species of *Plasmodium*: 57 *P. vivax*, 14 *P. falciparum* , 2 *P. ovale,* 1 *P. malariae* and 1 *P. falciparum/P. vivax*. Most notifications were from Queensland (52) and all cases were imported. The majority of notifications were in the 15-29 year age group (61%) with a male to female ratio of 3.8:1.

Vaccine preventable diseases (VPDs)

The total number of notifications for the different VPDs reached the lowest level since 1993 (Figure 4), with 213 notifications in March 2000. This was mainly the result of a continuing decline in notifications of pertussis.

There were no notifications of diphtheria or poliomyelitis. There was one case of *Haemophilus influenzae* type b reported from Queensland in a girl under 5 years of age with an unknown immunisation status. One case of tetanus was reported from New South Wales in a 76 year old female who was partly immunised. There was a slight increase in notifications of mumps in this notification period (16), compared with February 2000 (15), March 1999 (12) and the mean of the last five years (13). Most mumps cases occurred in the 20-24 year age group (44%), and the cases were evenly distributed between gender.

There were 9 cases of measles in March 2000, a decrease from February 2000 (12), March 1999 (75) and the mean of the last five years (51). Two cases were in the under 5 year age group (22%). The overall male to female ratio was 2:1. The immunisation status was unavailable for all the cases. Similarly, there was a decrease in rubella notifications in March 2000 (8), compared with February 2000 (17), March

Figure 2. Notifications of dengue, January 1999 to March 2000, Northern Territory, Queensland and Australia, by date of notification

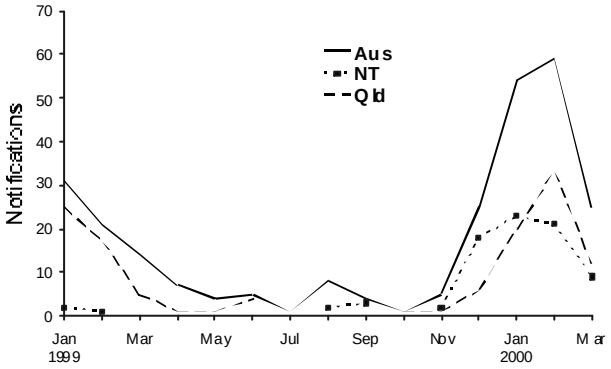


Figure 3. Notifications of malaria, January 1999 to March 2000, Northern Territory, Queensland, New South Wales and Australia, by date of notification

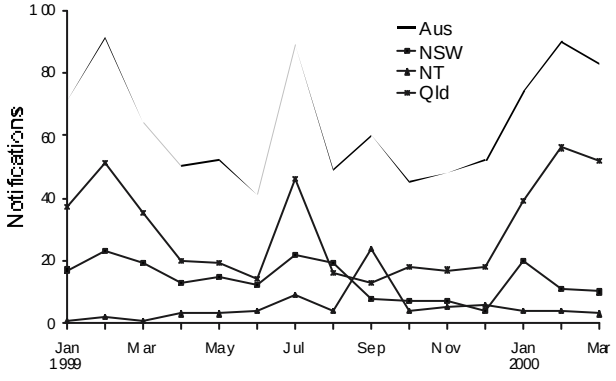


Figure 4. Notification trends of vaccine preventable diseases, January 1993 to March 2000

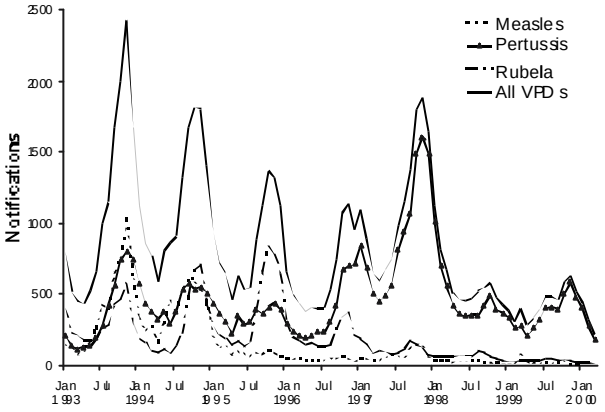
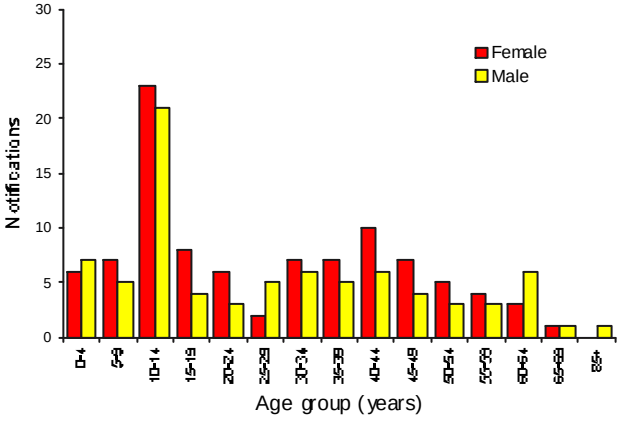


Figure 5. Notifications of pertussis, March 2000, by age group and sex



1999 (29) and the mean of the last five years (109). Most rubella cases were evenly distributed between decade age groupings up to 44 years of age with a male to female ratio 1.7:1.

A total of 178 pertussis notifications were received with a notification date in March 2000. This was the lowest number since June 1993. Most pertussis cases occurred in the 10-14 year age group (44/178; 25%), with an overall male to female ratio 0.8:1 (Figure 5). Immunisation status was only provided for 20 pertussis notifications with 5 cases fully immunised, 11 partly immunised and 4 not immunised.

Other diseases

There were 25 notifications of legionellosis in March 2000, with the majority again being in Victoria (60%) (please note Victorian outbreak report for April on page 92). This was less than for February 2000 (29) and for March last year (32) but was more than for the mean for the last 5 years (20).

There were 23 notifications of meningococcal infection in March 2000, with the majority again being in New South Wales (43%) and Victoria (35%). This was similar to that for February 2000 (22) and for the mean of the last 5 years (23), but less than for March last year (33). The majority of cases were either in the under 5 year age group (30%) or the 15-24 year age group (39%) (Figure 6). The overall male to female ratio was 1:1. Serotype information was provided for 48% (11/23) of the cases, with 45% serotype B (n=5) and 55% serotype C (n=6).

Echovirus 30 reports 1990-2000

The Virology and Serology Laboratory Reporting Scheme (LabVISE) is a voluntary scheme that receives reports from sentinel laboratories around Australia. LabVISE received 529 reports of echovirus 30 between January 1990 and January 2000. Victoria and New South Wales reported most activity (Figure 7). Victoria recorded a peak in the summer of 1994 and an increase in activity in December 1999, which continued into January 2000. New South Wales reported summer peaks in both 1994 and 1995 and a smaller winter peak in 1998. The majority of reports (51%) were received in late spring and summer. Other States reported a low level of activity over this period.

The age distribution of cases from whom echovirus 30 was isolated is shown in Figure 8. Over the 10 year period, 29% of reports were from children aged 0-9 years and 25% were in the 30-39 years age group. The male to female ratio was 1.04:1.

A clinical diagnosis was recorded for 73% (n=387) of reports. Of these, the most common clinical diagnosis was meningitis (87%).

The most common site of isolation of echovirus 30 was cerebrospinal fluid (64%) followed by respiratory tract (17%) and faeces (14%). All echovirus 30 isolates were diagnosed by viral culture techniques and confirmed by neutralisation or molecular techniques.

Figure 7. LabVISE reports of echovirus 30, Victoria and New South Wales, 1990-2000

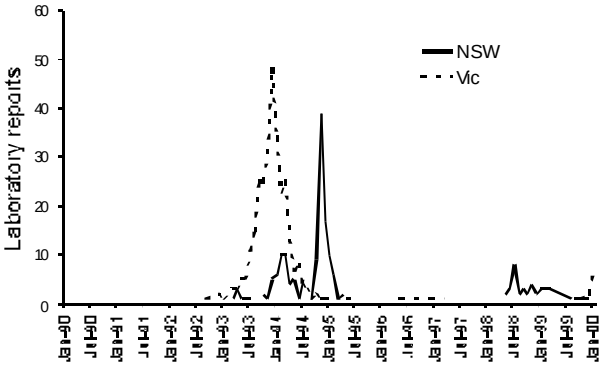


Figure 6. Notifications of meningococcal infection, January to March 2000, by age group and sex

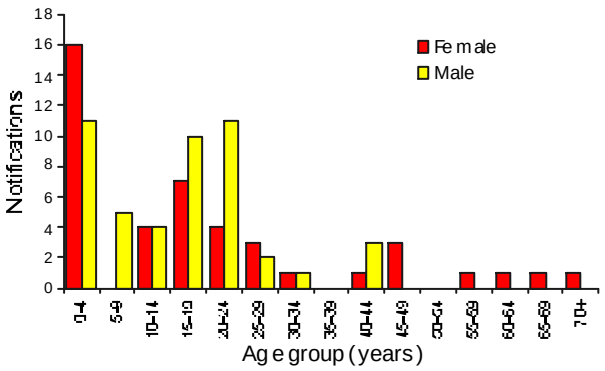
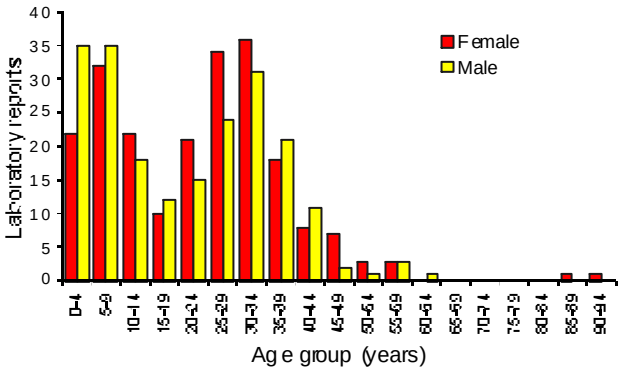


Figure 8. LabVISE echovirus 30 reports by age group and sex, 1990-2000



Tables

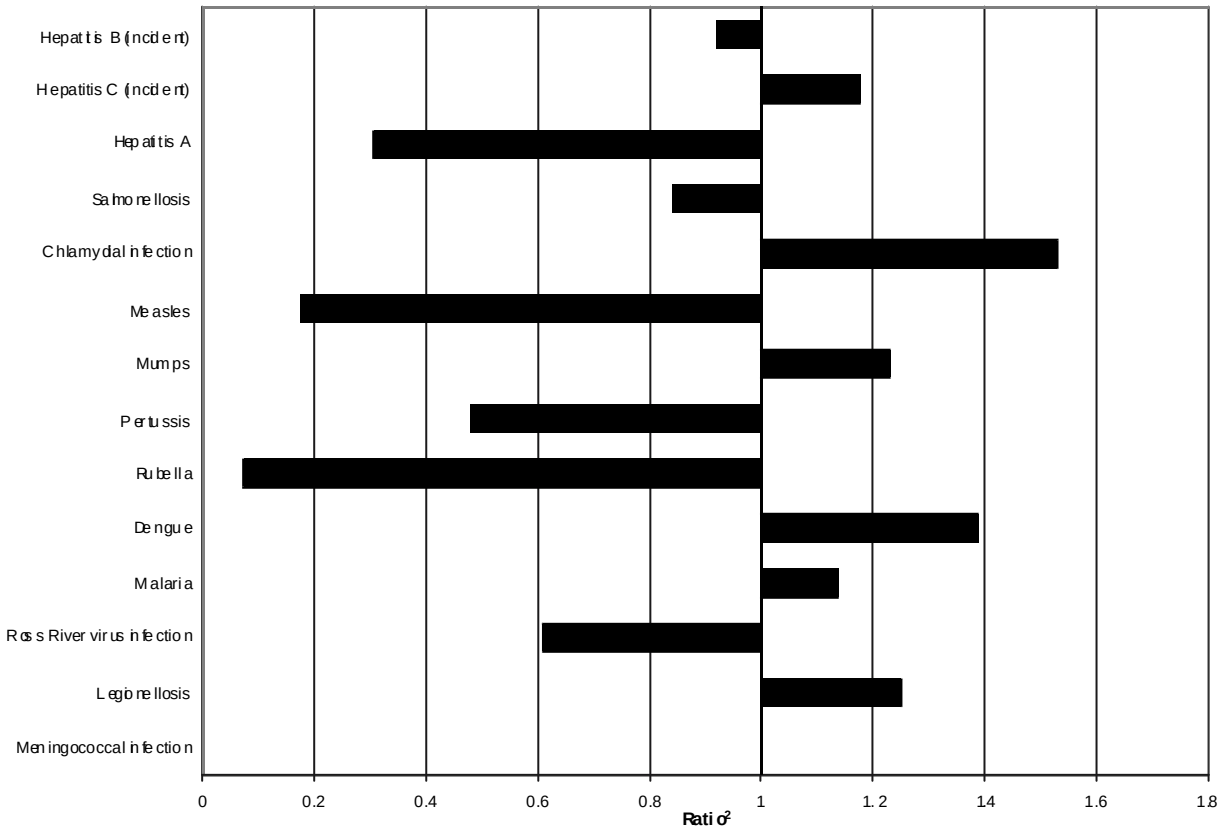
There were 7,136 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification date in March 2000 (Table 1). Data by date of report for weeks 9 to 12 ending 26 March 2000, are included in this issue of *CDI* (Table 2). The number of reports for selected diseases[1] have been compared with a 5 year mean, calculated using February to April data for the previous 5 years* (Figure 9).

There were 1,330 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the period, 1 to 31 March 2000 (Tables 3 and 4).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 9 to 12, ending 26 March 2000, are included in this issue of *CDI* (Table 5).

Surveillance data for these three schemes is now presented by calendar month rather than 4-weekly period.

Figure 9. Selected[1] diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 to 31 March 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 March to 31 March 2000, by date of notification[#]

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total Mar 2000[1]	Total Feb 2000[1]	Total Mar 1999[1]	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Bloodborne															
Hepatitis B (incident)	0	2	2	3	0	3	8	5	23	22	29	25	74	75	0.9
Hepatitis B (unspecified)[2]	9	176	0	92	0	7	183	61	528	535	699	586	1,655	1,736	0.9
Hepatitis C (incident)	3	1	0	-	9	0	1	6	20	34	30	17	72	44	1.2
Hepatitis C (unspecified)[2]	18	524	10	325	52	36	563	118	1,646	2,135	1,922	1,307	5,352	3,941	1.3
Hepatitis D	0	0	0	3	0	0	0	0	3	0	1	2	3	4	1.5
Gastrointestinal															
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ns
Campylobacterosis[3]	23	-	23	316	134	16	345	145	1,002	1,025	1,200	929	3,172	2,999	1.1
Haemolytic uraemic syndrome	NN	0	0	0	0	0	2	0	2	1	2	3	4	2	0.7
Hepatitis A	0	16	0	10	7	1	21	15	70	103	160	229	297	735	0.3
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	*	0	1	0.0
Listeriosis	0	0	2	0	1	1	1	2	7	7	4	6	24	21	1.2
Salmonellosis	7	96	42	220	77	22	110	98	672	639	1,309	798	2,005	2,502	0.8
Shigellosis[3]	0	-	9	11	3	0	8	10	41	44	72	66	128	211	0.6
SLTEC,VTEC[4]	NN	0	0	NN	4	0	NN	NN	4	5	2	3	13	4	1.3
Typhoid	0	6	0	0	0	0	0	1	7	6	6	8	21	30	0.9
Yersiniosis[3]	2	-	0	8	1	0	1	0	12	9	20	21	29	85	0.6
Quarantinable															
Cholera	0	0	0	0	0	0	0	0	0	1	0	*	1	1	0.0
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ns
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ns
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ns
YellowFever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ns
Sexually transmissible															
Chancroid	0	0	0	0	0	0	0	0	0	0	0	*	0	1	0.0
Chlamydial infection[5]	27	181	92	472	69	37	241	160	1,279	1,287	1,294	836	3,725	2,471	1.5
Donovanosis	0	0	0	1	NN	0	0	0	1	0	1	4	6	14	0.3
Gonococcal infection[6]	0	63	105	110	10	4	68	110	470	445	496	404	1,433	1,165	1.2
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0.0
Syphilis[7]	0	37	20	81	0	0	0	1	139	125	191	147	394	439	0.9

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total Mar 2000[1]	Total Feb 2000[1]	Total Mar 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	ns
Haemophilus influenzae type b	0	0	0	1	0	0	0	0	1	0	2	4	4	14	0.3
Measles	0	3	0	4	0	0	0	2	9	12	75	5'	29	181	0.2
Mumps	1	7	0	0	0	0	3	5	16	15	12	13	44	40	1.2
Pertussis	6	69	0	43	9	13	37	1	178	271	277	37'	847	1,403	0.5
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ns
Rubella[8]	0	2	0	5	0	0	1	0	8	17	29	109	43	400	0.1
Tetanus	0	1	0	0	0	0	0	0	1	1	1	'	3	2	1.0
Vectorborne															
Arbovirus infection NEC	0	0	0	0	0	0	10	1	11	8	13	9	22	29	1.2
Barmah Forest virus infection	0	12	1	39	0	0	2	6	60	61	65	100	173	266	0.6
Dengue	0	2	9	12	1	0	1	0	25	59	14	18	138	74	1.4
Malaria	3	10	3	52	3	2	9	1	83	90	64	73	247	246	1.1
Ross River virus infection	2	67	5	233	68	3	85	139	602	624	1,000	950	1,794	2,662	0.6
Zoonoses															
Brucellosis	0	0	0	1	1	0	0	0	2	0	4	3	4	9	0.7
Hydatid infection	0	NN	0	1	0	0	3	1	5	4	3	3	11	7	1.7
Leptospirosis	0	4	0	29	0	0	0	0	33	11	55	2'	63	55	1.6
Ornithosis	0	NN	0	NN	0	0	3	2	5	5	4	7	15	20	0.7
Q Fever	0	8	0	46	0	0	1	2	57	44	44	4'	140	124	1.4
Other															
Legionellosis	2	4	0	2	1	0	15	1	25	29	32	20	79	61	1.3
Leprosy	0	0	0	0	0	0	0	0	0	0	0	'	0	2	0.0
Meningococcal infection	0	10	0	4	0	0	8	1	23	22	33	23	90	65	1.0
Tuberculosis	0	17	0	4	5	1	31	6	63	78	90	60	229	262	0.8
Total	103	1,318	323	2,128	455	146	1,761	902	7,136	8,090	9,671	7,864	23,353	24,445	

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 9 to 12, by date of report*, March 2000

Week number	9	10	11	12	Year to
Week ending on	5 March 2000	12 March 2000	19 March 2000	26 March 2000	date total
Disease[1]					
Bloodborne					
Hepatitis B (incident)	6	12	7	7	81
Hepatitis B (unspecified)[2]	113	156	138	113	1,709
Hepatitis C (incident)	7	6	5	9	80
Hepatitis C (unspecified)[2]	424	411	377	380	5,230
Hepatitis D	0	0	0	2	2
Gastrointestinal					
Botulism	0	0	0	0	0
Campylobacterosis[3]	240	228	248	257	0
Haemolytic uraemic syndrome	0	0	1	0	3,051
Hepatitis A	24	26	21	16	3
Hepatitis E	0	0	0	0	306
Listeriosis	0	1	1	1	20
Salmonellosis	157	154	156	163	1,920
Shigellosis[3]	16	6	11	8	116
SLTEC,VTEC[4]	3	2	0	1	15
Typhoid	0	0	1	3	23
Yersiniosis[3]	2	4	1	2	25
Quarantinable					
Cholera	0	1	0	0	1
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	298	289	313	3,562
Donovanosis	2	0	1	1	7
Gonococcal infection[6]	116	77	123	102	1,338
Lymphogranuloma venereum	0	0	0	0	0
Syphilis[7]	19	51	35	26	410
Vaccine preventable					
Diphtheria	0	0	0	0	0
Haemophilus influenzae type b	0	0	0	0	4
Measles	1	3	4	3	29
Mumps	6	0	1	4	39
Pertussis	55	63	44	59	1,007
Poliomyelitis	0	0	0	0	0
Rubella[8]	6	3	1	1	44
Tetanus	0	0	0	1	3
Vectorborne					
Arbovirus infection NEC	4	2	1	2	16
Barmah Forest virus infection	14	16	15	13	166
Dengue	24	12	15	10	143
Malaria	32	13	17	17	227
Ross River virus infection	148	147	145	173	1,703

Table 2. Notifications of diseases received by State and Territory health authorities for weeks 9 to 12, by date of report*, March 2000 (continued)

Week number	9	10	11	12	Year to
Week ending on	5 March 2000	12 March 2000	19 March 2000	26 March 2000	date total
Disease[1]					
Zoonoses					
Brucellosis	0	0	1	0	4
Hydatid infection	1	1	1	2	9
Leptospirosis	0	0	9	9	51
Ornithosis	3	1	2	0	20
Q Fever	8	6	16	9	133
Other					
Legionellosis	6	8	6	8	76
Leprosy	0	0	0	0	0
Meningococcal infection	5	5	8	2	93
Tuberculosis	21	20	22	11	251
Total	1,755	1,733	1,723	1,728	21,917

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 State or Territory[1] for the reporting period 1 to 31 March 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	0	0	1	2	3	76	12	85
Mumps virus	0	0	0	0	0	0	1	5	6	6	20	15
Rubella virus	0	0	1	1	0	0	1	1	4	9	13	20
Hepatitis viruses												
Hepatitis A virus	0	0	0	1	3	0	0	4	8	38	49	116
Arboviruses												
Ross River virus	0	3	3	29	42	0	3	78	158	295	520	592
Barmah Forest virus	0	0	1	13	0	0	0	1	15	17	61	44
Dengue type 3	0	0	0	0	0	0	0	2	2	0	3	3
Dengue not typed	0	3	7	0	0	0	0	9	19	7	117	15
Flavivirus (unspecified)	0	0	1	2	0	0	3	0	6	4	29	16
Adenoviruses												
Adenovirus type 1	0	0	0	0	0	0	1	0	1	0	2	1
Adenovirus type 3	0	0	0	0	2	0	1	0	3	2	9	8
Adenovirus type 4	0	0	0	0	1	0	1	0	2	1	4	5
Adenovirus type 40	0	0	0	0	0	0	0	7	7	5	19	14
Adenovirus not typed/pending	0	2	2	0	12	0	12	21	49	87	256	249
Herpes viruses												
Cytomegalovirus	0	6	1	16	19	0	24	4	70	128	307	316
Varicella-zoster virus	3	6	0	9	10	1	38	21	88	118	392	433
Epstein-Barr virus	0	9	0	47	45	1	7	20	129	234	533	673
Other DNA viruses												
Molluscum contagiosum	0	0	0	0	0	0	0	1	1	0	5	3
Parvovirus	0	1	0	0	0	0	6	10	17	24	83	95
Picorna virus family												
Echovirus type 30	0	0	0	0	0	0	14	0	14	3	40	6
Rhinovirus (all types)	0	16	0	0	3	0	0	6	25	39	76	84
Enterovirus not typed/pending	0	0	0	2	0	0	115	13	130	88	249	196
Ortho/paramyxoviruses												
Influenza A virus	4	3	1	2	10	0	2	9	31	44	179	116
Influenza B virus	0	1	0	0	5	0	0	4	10	11	25	28
Parainfluenza virus type 1	0	12	0	0	1	0	2	12	27	4	44	9
Parainfluenza virus type 2	0	0	0	2	1	0	0	1	4	7	6	12
Parainfluenza virus type 3	0	1	0	0	3	0	2	2	8	42	66	129
Respiratory syncytial virus	0	22	0	29	6	0	10	30	97	117	219	212
Other RNA viruses												
Rotavirus	1	10	0	0	6	0	2	5	24	60	121	156

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.

Table 3. Virology and serology laboratory reports by State or Territory[1] for the reporting period 1 to 31 March 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				
Other												
Chlamydia trachomatis not typed	11	21	28	67	29	5	6	54	221	259	810	754
Chlamydia psittaci	0	0	0	0	0	0	3	2	5	0	21	13
Chlamydia species	0	1	0	0	0	0	0	0	1	4	3	6
Mycoplasma pneumoniae	0	2	0	16	4	0	13	5	40	81	146	284
Coxiella burneti i (Q fever)	1	0	0	0	0	0	1	1	3	16	22	46
Streptococcus group A	0	2	9	18	0	0	0	0	29	0	109	0
Bordetella pertussis	0	0	0	1	2	1	18	1	23	76	157	171
Legionella pneumophila	0	0	0	0	0	0	0	1	1	4	2	12
Legionella longbeachae	0	0	0	0	2	0	0	3	5	3	16	13
Leptospira species	0	0	0	3	0	0	0	0	3	0	8	0
Treponema pallidum	0	0	19	20	0	0	0	0	39	6	128	6
Entamoeba histolytica	0	0	0	1	0	0	0	0	1	0	8	0
Echinococcus granulosus	0	0	0	0	0	0	0	1	1	0	3	0
Total	20	121	73	279	206	8	287	336	1,330	1,915	4,892	4,956

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 4. Virology and serology laboratory reports by contributing laboratories for the reporting period 1 to 31 March 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	27	67
	New Children's Hospital, Westmead	41	86
New South Wales	Repatriation General Hospital, Concord	0	0
	Royal Prince Alfred Hospital, Camperdown	43	59
	South West Area Pathology Service, Liverpool	0	0
Queensland	Queensland Medical Laboratory, West End	324	596
	Townsville General Hospital	26	33
South Australia	Institute of Medical and Veterinary Science, Adelaide	208	473
Tasmania	Northern Tasmanian Pathology Service, Launceston	7	12
	Royal Hobart Hospital, Hobart	0	0
Victoria	Monash Medical Centre, Melbourne	2	4
	Royal Children's Hospital, Melbourne	71	119
	Victorian Infectious Diseases Reference Laboratory, Fairfield	229	348
Western Australia	PathCentre Virology, Perth	329	491
	Princess Margaret Hospital, Perth	35	88
	Western Diagnostic Pathology	9	9
Total		1,351	2,385

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 5. Australian Sentinel Practice Research Network reports, weeks 9 to 12, 2000

Week number	9		10		11		12	
Week ending on	5 March 2000		12 March 2000		19 March 2000		26 March 2000	
Doctors reporting	71		66		70		69	
Total encounters	8,855		7,969		8,917		8,325	
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	25	2.8	20	2.5	19	2.1	32	3.8
Chickenpox	9	1.0	9	1.1	9	1.0	4	0.5
Gastroenteritis	81	9.1	61	7.7	67	7.5	80	9.6
Gastroenteritis with stool culture	12	1.4	16	2.0	12	1.3	14	1.7
ADT immunisations	68	7.7	51	6.4	61	6.8	57	6.8

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

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 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 CDI 2000;24:10.

June – December 1999

The last report (*CDI* 1999;23:315) presented data collected retrospectively for the period January to July 1999. Active rotavirus surveillance began in June 1999. From June to December 1999 over 1,300 rotavirus specimens were collected from 14 centres Australia-wide. Most centres reported rotavirus seasons, with Sydney experiencing a 'big season' (over 200 specimens). In contrast, Hobart reported only 7 rotavirus positives for the same period. Serotype analysis of representative specimens has shown serotype G1 to be the dominant infecting serotype Australia-wide. This result is consistent with previous findings in Australia.[1,2]

Serotype G9 rotaviruses appeared in Australia for the first time in Sydney in June 1999.[3] The G9 rotaviruses appeared in Sydney, Melbourne and Brisbane initially, and were considered a random occurrence and exclusive to the three cities. However, ongoing serotyping analysis has shown G9 rotaviruses to be the second most common serotype. They were detected in (in order of chronological appearance) Alice Springs, Narrabri, Perth, Adelaide and Newcastle. The serotyping EIA results were confirmed by northern hybridisation analysis and/or reverse transcriptase/ polymerase chain reaction (RT/PCR) assay, using G9 specific oligonucleotide primers for the outer capsid viral protein, VP7.

The G9 viruses displayed genetic variation with three different RNA electrophoretic migration patterns. Differing reactivities with the G9-specific monoclonal antibody, suggests that they are antigenically different viruses. Sequence analysis has shown that one of the viruses resembles a G9 strain from India.[3] The detection of G9 rotaviruses in the United States of America (USA),[4] Bangladesh,[5] India,[6] the United Kingdom,[7,8] Malawi,[9] and Nigeria[10] suggests that G9 viruses may be emerging as important human pathogens. G9 rotaviruses isolated in the USA have been shown to display more than one subgroup specificity.[11] To date, the G9 viruses reported in Australia have been limited to only one subgroup. Further analysis of these specimens is warranted.

Retrospective RT/PCR analysis of specimens that were previously unable to be assigned a serotype, has shown that G9 rotaviruses were present in Perth and Melbourne in 1997 and 1998. These were isolated incidents, and do not appear to be as important as those seen in 1999. The virus took 3 months to cross the country, and appeared simultaneously in Melbourne and Sydney in June 1999. The extent of the spread shows the importance of this pathogen. The appearance of G9 viruses coincides with the diminishing prevalence of serotype G4 viruses, which share some serological similarities with the G9 virus. This leads us to believe there are active selective pressures on circulating rotavirus serotypes. This observation is limited to the 1999 sampling period and requires further investigation.

The National Rotavirus Reference Centre welcomes notifications of rotavirus outbreaks and receipt of rotavirus positive specimens from those outbreaks wherever possible.

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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 30 November 1999, as reported to 29 February 2000, are included in this issue of CDI (Tables 6 and 7).

Table 6. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 30 November 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	3	1	0	0	0	1	2	7	11	70	87
	Male	0	27	1	7	1	0	10	3	49	61	554	585
	Sex not reported	0	0	0	0	0	0	0	0	0	1	3	6
	Total[1]	0	30	2	7	1	0	11	5	56	73	627	678
AIDS diagnoses	Female	0	1	0	0	0	0	0	0	1	1	14	16
	Male	0	4	0	3	0	0	3	0	10	14	113	254
	Total[1]	0	5	0	3	0	0	3	0	11	15	127	270
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	0	3	8
	Male	0	2	0	0	0	0	4	0	6	12	88	135
	Total[1]	0	2	0	0	0	0	4	0	6	12	92	143

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

Table 7. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 30 November 1999, by sex and State or Territory

		State or Territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	25	603	11	145	61	6	212	113	1,176
	Male	192	10,764	108	1,956	672	79	3,864	902	18,537
	Sex not reported	0	259	0	0	0	0	24	0	283
	Total[1]	217	11,645	119	2,108	733	85	4,113	1,018	20,038
AIDS diagnoses	Female	8	182	0	47	25	3	68	26	359
	Male	86	4,612	36	811	345	44	1,603	345	7,882
	Total[1]	94	4,806	36	860	370	47	1,678	373	8,264
AIDS deaths	Female	3	113	0	31	15	2	47	16	227
	Male	65	3,165	24	564	230	28	1,260	246	5,582
	Total[1]	68	3,286	24	597	245	30	1,313	263	5,826

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

Childhood Immunisation Coverage

Tables 8 and 9 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 October and 31 December 1998 and at 24 months of age for the cohort born between 1 October and 31 December 1997, according to the Australian Standard Vaccination Schedule.

A full description of the methodology used can be found in CDI 1998;22:36-37.

Table 8. Percentage of children immunised at 1 year of age, preliminary results by disease and State for the birth cohort 1 October to 31 December 1998; assessment date 31 March 2000.

	State or Territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	1,046	21,322	808	11,233	4,527	1,610	15,524	6,179	62,249
Diphtheria, Tetanus, Pertussis (%)	92.4	88.3	85.5	90.4	90.5	90.1	90.7	87.8	89.5
Poliomyelitis (%)	92.4	88.3	85.5	90.4	90.5	90.1	90.7	87.8	89.5
Haemophilus influenzae type b (%)	92.1	87.4	88.4	90.6	89.4	89.1	90.1	86.9	88.9
Fully immunised (%)	91.8	86.6	83.0	89.7	89.1	88.3	89.4	85.8	88.1
Change in fully immunised since last quarter (%)	+2.0	+1.9	-0.8	-0.2	+1.1	+0.1	+1.4	-0.1	+1.1

Table 9. Proportion of children immunised at 2 years of age, preliminary results by disease and State for the birth cohort 1 October to 31 December 1997; assessment date 31 March 2000[1]

	State or Territory								
Vaccine	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
Total number of children	1,055	22,021	843	11,867	4,568	1,536	15,667	6,146	63,703
Diphtheria, Tetanus, Pertussis (%)	85.8	82.8	77.3	86.6	84.2	84.6	84.0	79.8	83.6
Poliomyelitis (%)	85.8	82.8	77.3	86.6	84.2	84.6	84.1	79.9	83.7
Haemophilus influenzae type b (%)	85.6	82.0	85.6	86.9	83.0	84.4	83.8	79.4	83.4
Measles, Mumps, Rubella (%)	90.5	87.8	87.4	90.7	91.3	92.2	91.8	87.8	89.7
Fully immunised (%)[2]	82.6	73.8	73.0	81.5	77.9	78.7	77.7	73.3	76.7
Change in fully immunised since last quarter (%)	0.1	+2.8	+3.4	+2.1	+0.2	+4.7	+0.9	+0.3	+1.8

1. The 12 months age data for this cohort was published in *CDI* 1999;23:110.
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.