COMMUNICABLE DISEASES SURVEILLANCE

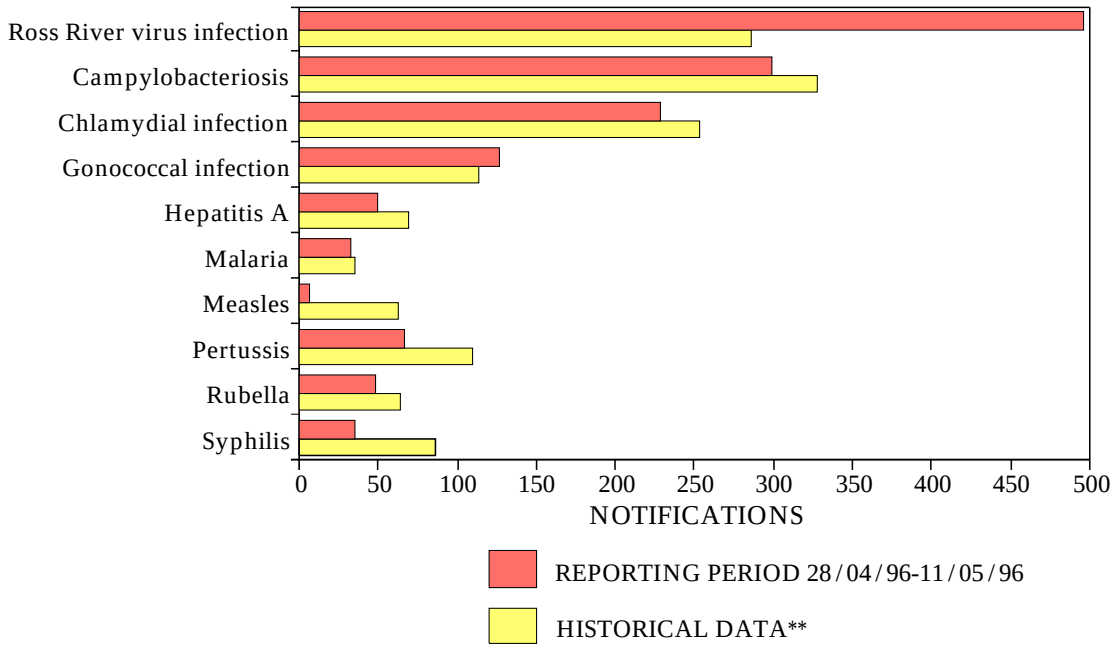
National Notifiable Diseases Surveillance System, 28 April to 11 May 1996

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia-New Zealand. The System coordinates the national surveillance of 41 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 legislation. De-identified core unit data are supplied fortnightly for collation, analysis and dissemination.

There were 2,098 notifications received for this two week period (Tables 1, 2 and 3). The number of reports for selected diseases have been compared with averaged data for previous years (Figure 1). No reports were received from Victoria for the current period. This should be taken into account in interpreting the figure.

Since the approval of the Hib vaccine in 1992 there has been a marked and sustained decline in the numbers of reported cases of ***Haemophilus influenzae* type b infection** in children under five years of age (Figure 2). Of the 114 cases in this age group with reported onset in the last two years, 41 (36%) were less than one year old. The number of case reports in persons five years or older has also declined. There has been a decrease from 77 cases in this age group in 1993 to 27 cases in 1995.

Figure 1. Selected National Notifiable Diseases Surveillance System reports, and historical data[1]



1. The historical data are the averages of the number of notifications in 9 previous 2-week reporting periods: the corresponding periods of the last 3 years and the periods immediately preceding and following those.

The number of notifications of **pertussis** has remained stable in recent months (Figure 3). There has been a peak in notifications reported each Spring with the highest number of reports in November 1993. The highest number of cases is in the 5-9 years age group. There were also high numbers of cases in the 35-39 years age group (Figure 4). Of the 5,336 cases reported since the beginning of 1995, 32% have been reported from New South Wales and 30% from Queensland.

Figure 2. *Haemophilus influenzae* type b notifications for 0-4 years age group, 1993 to 1996, by month of onset

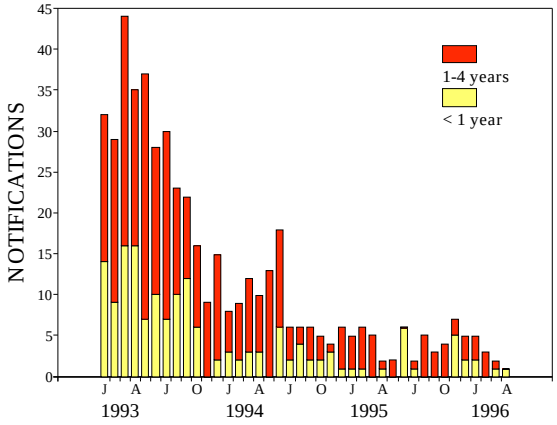


Figure 3. Pertussis, notifications, 1993 to 1996, by month of onset

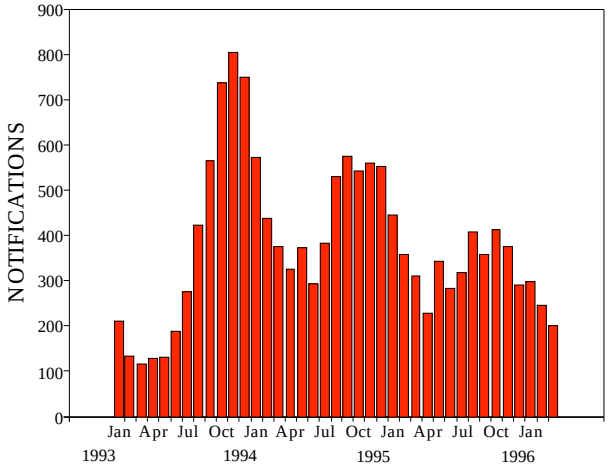


Figure 4. Pertussis notifications, 1995 to 1996, by age group and sex

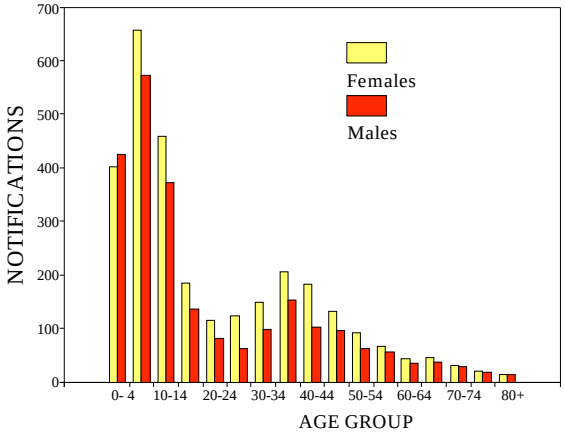


Table 1. Notifications of diseases preventable by vaccines recommended by the NHMRC for routine childhood immunisation, received by State and Territory health authorities in the period 28 April to 11 May 1996

DISEASE	ACT	NSW	NT	Qld	SA	Tas	WA	TOTALS FOR AUSTRALIA[1]			
								This period 1996	This period 1995	Year to date 1996	Year to date 1995
Diphtheria	0	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae type b	0	1	0	0	0	0	0	1	1	21	34
Measles	0	3	0	2	0	0	1	6	40	169	703
Mumps	0	0	0	NN	0	0	0	0	7	46	47
Pertussis	0	24	1	25	17	0	0	67	113	1042	1638
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0
Rubella	3	6	0	32	5	1	1	48	64	1101	965
Tetanus	0	0	0	0	0	0	0	0	0	1	2

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.

NN Not Notifiable.

Table 2. Notifications of other diseases[1] received by State and Territory health authorities in the period 28 April to 11 May 1996

DISEASE	ACT	NSW	NT	Qld	SA	Tas	WA	TOTALS FOR AUSTRALIA[2]			
								This period 1996	This period 1995	Year to date 1996	Year to date 1995
Arbovirus Infection (NEC)[3,4]	0	36	1	7	0	0	1	45	44	257	270
Barmah Forest virus	0	0	-	54	0	0	-	54	20	363	173
Ross River virus	0	43	1	416	1	-	36	497	231	6261	1286
Dengue	0	1	0	1	0	-	0	2	1	19	8
Campylobacteriosis[5]	11	-	9	100	105	17	56	298	393	4126	3834
Chlamydial infection (NEC)[6]	0	NN	33	133	0	18	45	229	236	2475	2320
Donovanosis	0	NN	0	0	NN	0	0	0	9	19	37
Gonococcal infection[7]	0	12	25	46	0	0	42	125	154	1269	1135
Hepatitis A	1	23	3	18	1	0	4	50	68	902	657
Hepatitis B incident	0	3	1	3	0	0	0	7	14	88	138
Hepatitis B unspecified	4	0	0	64	0	4	14	86	47	549	639
Hepatitis C incident	0	0	0	0	0	0	0	0	0	6	29
Hepatitis C unspecified	10	0	4	132	0	11	29	186	298	3185	2949
Hepatitis (NEC)	0	0	0	0	0	0	NN	0	1	9	11
Legionellosis	0	1	0	0	1	0	1	3	6	65	83
Leptospirosis	0	1	0	6	0	0	0	7	1	92	44
Listeriosis	0	0	0	0	1	0	0	1	0	20	34
Malaria	1	8	3	18	1	0	2	33	16	301	218
Meningococcal infection	0	4	0	5	0	0	1	10	13	92	111
Ornithosis	0	NN	0	1	0	0	1	2	3	35	60
Q fever	0	11	0	7	0	0	0	18	9	167	155
Salmonellosis (NEC)	0	30	12	142	14	8	20	226	254	2589	3039
Shigellosis[5]	0	-	2	7	2	0	7	18	26	243	335
Syphilis	1	13	8	13	0	1	0	36	96	523	712
Tuberculosis	1	12	2	6	6	0	1	28	51	403	432
Typhoid8	0	0	0	0	0	0	0	0	2	34	31
Yersiniosis (NEC)[5]	0	-	0	6	2	0	0	8	10	102	152

1. For HIV and AIDS, see *CDI* 1996;20:247. For rarely notified diseases, see Table 3 .
2. 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.
3. Tas: includes Ross River virus and dengue.
4. WA, NT and Vic: includes Barmah Forest virus.
5. NSW: only as 'foodborne disease' or 'gastroenteritis in an institution'.
6. WA: genital only.
7. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
8. NSW, Vic: includes paratyphoid.

NN Not Notifiable.

NEC Not Elsewhere Classified.

\- Elsewhere Classified.

Table 3. Notifications of rare[1] diseases received by State and Territory health authorities

DISEASES	Total this period	Reporting States or Territories	Year to date 1996
Botulism	0		0
Brucellosis	3	Qld	12
Chancroid	0		1
Cholera	0		2
Hydatid infection	3	ACT 1, NSW2	16
Leprosy	1	NSW	6
Lymphogranuloma venereum	0		0
Plague	0		0
Rabies	0		0
Yellow fever	0		0
Other viral haemorrhagic fevers	0		0

National Influenza Surveillance 1996

Australian Sentinel Practice Research Network; Communicable Diseases Intelligence Virology and Serology Reporting Scheme Contributing Laboratories, New South Wales Department of Health; Victorian Department of Health; World Health Organization Collaborating Centre for Influenza Reference and Research.

National Influenza Surveillance is conducted from May to September each year. Data are combined from a number of sources to provide an indication of influenza activity. Included are sentinel general practitioner surveillance data, absenteeism data from a national employer, and laboratory data from the LabVISE scheme and the World Health Organization Collaborating Centre for Influenza Reference and Research. For further information, see *CDI* 20 1996, pages 9-12.

The consulation rates for influenza-like illness recorded by sentinel general practitioners continues to rise (Figure 5). The absenteeism rate for a national employer remains stable (Figure 6). With respect to laboratory based surveillance there were three reports of influenza A received this fortnight. A total of 40 reports (Figure 7) have been received for the year to date, which is below average for the time of year. A single report of sub-type H_3N_2 and no reports of H_1N_1 have been received so far this year.

Only five reports of influenza type B have been received so far for the year to date (Figure 8).

Figure 5. Sentinel general practitioner influenza reports per 1,000 encounters, 1996, by week

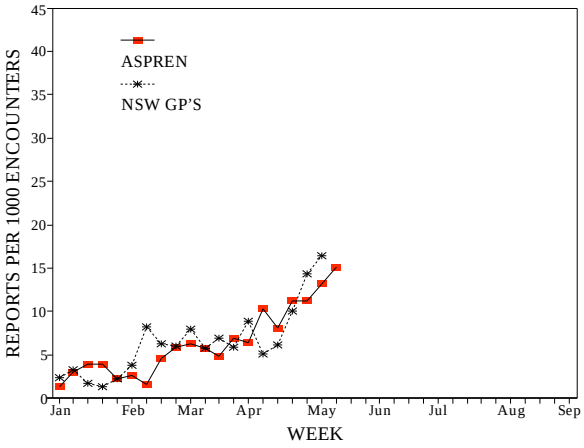


Figure 6. Absenteeism reports, 1996, by week

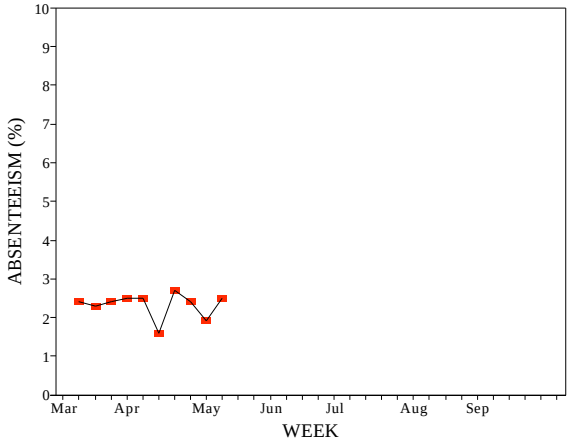


Figure 7. Influenza A laboratory reports, 1996, by method of diagnosis and week of specimen collection

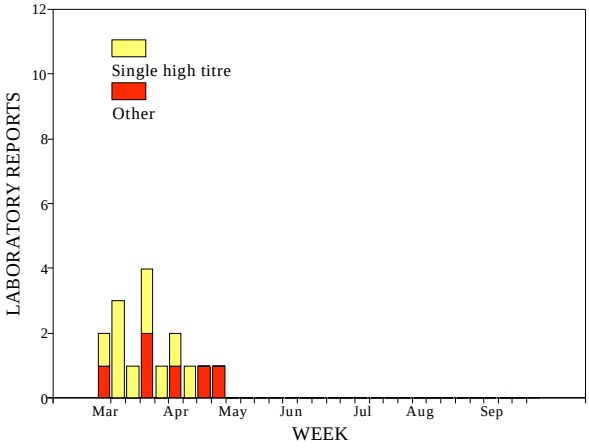


Figure 8. Influenza B laboratory reports, 1996, by method of diagnosis and week of specimen collection

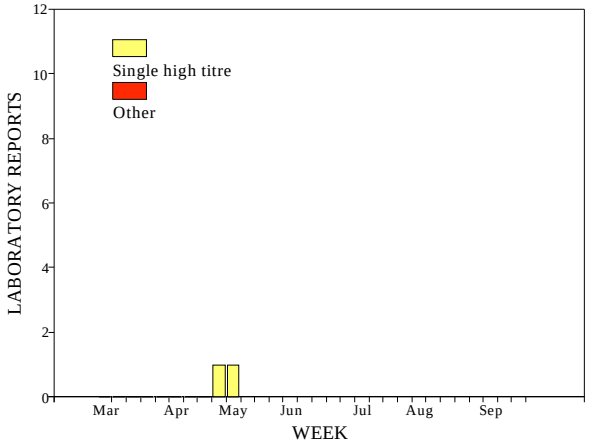


Table 4. Australian Sentinel Practice Research Network, weeks 17, 18 and 19, 1996

Condition	Week 17, to 28 April 1996		Week 18, to 5 May 1996		Week 19, to 12 May 1996	
	Reports	Rate per 1000 encounters	Reports	Rate per 1000 encounters	Reports	Rate per 1000 encounters
Influenza	87	11.2	145	13.1	156	15.1
Rubella	3	0.4	8	0.7	4	0.4
Measles	2	0.3	0	0	0	0
Chickenpox	18	2.3	23	2.1	25	2.4
Pertussis	0	0	3	0.3	2	0.2
Gastroenteritis	108	13.9	235	21.3	192	18.6

Australian Sentinel Practice Research Network

The data for weeks 17, 18 and 19 ending 28 April, 5 May and 12 May 1996 respectively are included in this issue of *CDI* (Table 4). The rate of reporting of influenza-like illness rose to 15.1 per 1,000 consultations for week 19, the highest rate recorded by the scheme this year.

HIV and AIDS Surveillance

Correction: In *CDI* 1996;20:249 the headings for the HIV / AIDS Tables were transposed. Table 4 was cumulative diagnoses and Table 5 was new diagnoses.

Surveillance of Serious Adverse Events Following Vaccination

The Serious Adverse Events Following Vaccination Surveillance Scheme is a national surveillance scheme which monitors the serious adverse events which occur rarely following vaccination. More details on the Scheme were published in *CDI* 1995:19;273-274.

Acceptance of a report does not imply a causal relationship between administration of the vaccine and the medical outcome, or that the report has been verified as to the accuracy of its contents.

It is estimated that 250,000 doses of vaccines are administered every month to Australian children under the age of six years.

Results for the reporting period 14 April to 11 May 1996

There were three reports of serious adverse events following vaccination for this reporting period. Reports were received from Queensland (one) and the Northern Territory (2).

All three reports were of persistent screaming and were associated with DTP vaccine alone or DTP in combination with OPV and Hib. One report noted that a general practitioner had diagnosed clinical pertussis in a child the day following immunisation. An older sibling had had a similar illness at the time of immunisation, diagnosed as pertussis or pertussis syndrome.

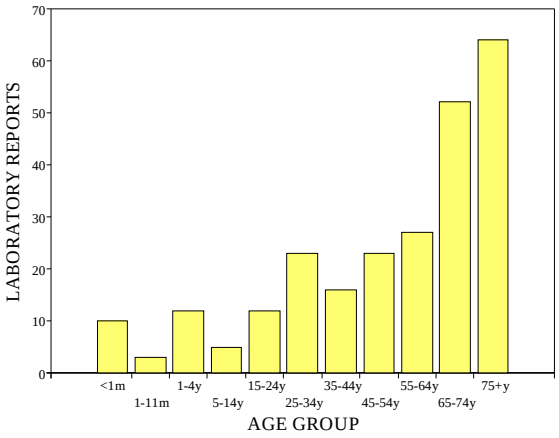
Two events were associated with the first dose of vaccine(s) and one event was associated with the second dose. None of the children were hospitalised and all had recovered at the time the initial report was sent in.

Sterile Sites Surveillance (LabDOSS)

LabDOSS is a passive surveillance scheme that reports on significant bacterial and fungal isolates from normally sterile sites. Twenty laboratories currently forward reports of sterile site isolates to the Department of Health and Family Services. LabDOSS is published in alternate issues of *CDI*. Data from the LabDOSS scheme should be interpreted with caution. There is a potential for geographical, testing and referral pattern biases. In addition, risk factors and clinical information are not consistently provided by laboratories.

Data for this four weekly period have been provided by 8 laboratories. There were 268 reports of significant sepsis:

Figure 9. LabDOSS reports of blood isolates, by age group



New South Wales: Royal North Shore Hospital 40; Prince of Wales Hospital 45.
Tasmania: Royal Hobart Hospital 29; Northern Tasmania Pathology Service 9.
Queensland: Sullivan and Nicholaides Partners 49.
Western Australia: Princess Margaret Hospital for Children 15; Sir Charles Gairdner Hospital 72.
Australian Capital Territory: Woden Valley Hospital 9.

Organisms reported five or more times from blood are detailed in Table 5. Other blood isolates not included in Table 5 were:

Gram-positive: 1 *Bacillus cereus*, 1 *Bacillus* species, 1 *Lactobacillus* species, 1 *Micrococcus* species, 2 *Micrococcus mucilaginosus*, 2 *Streptococcus* Group A, 3 *Streptococcus* Group B, 4 *Streptococcus* Group G, 2 *Streptococcus* 'milleri' and 4 *Streptococcus sanguis.*

Gram-negative: 1 *Citrobacter diversus*, 3 *Citrobacter freundii*, 1 *Enterobacter aerogenes*, 1 *Enterobacter* species, 1 *Haemophilus influenzae*, 4 *Klebsiella oxytoca, 1 Pasteurella* species, 1 *Pseudomonas testosteroni*, 1 *Salmonella* species, 1 *Salmonella typhi*, 2 *Serratia marcescens* and 1 *Xanthomonas maltophilia.*

Anaerobes: 3 *Bacteroides fragilis*, 1 *Propionibacterium acnes* and 2 *Propionibacterium* species.

Fungi: 3 *Candida species*, 2 *Candida albicans* and 1 *Rhodotorula glutinis.*

There were 116 (43% of total) blood isolates reported for patients over the age of 65 years (Figure 9).

Meningitis and/or CSF isolate reports

There were 12 reports of meningitis and/or CSF isolates (Table 6). Included were 5 *Streptococcus pneumoniae* (including 3 patients aged less than 12 months) and two *Staphylococcus* coagulase negative.

Table 5. LabDOSS reports of blood isolates, by organism and clinical information

Organism	Clinical information						Risk factors					Total[1]
	Bone/Joint	Lower respiratory	Endocarditis	Gastrointestinal	Urinary tract	Skin	Surgery	Immunosuppressed	IV line	Hospital acquired	Neonatal	
Acinetobacter species						1	1	1		1		5
Enterobacter cloacae				1				1	1	1		5
Enterococcus faecalis			1	2		2	1			1		6
Escherichia coli		2		1	13	1	2	6	1	5	1	45
Klebsiella pneumoniae		2			1	1		4	1	1		10
Proteus mirabilis						4		4		2		7
Pseudomonas aeruginosa		1			1	2	1	5		1		12
Staphylococcus aureus	2	1			1	12	4	7	5	14		48[2]
Staphylococcus coagulase negative							1	1			1	20
Staphylococcus epidermidis						4	3	3	1	4		20
Streptococcus pneumoniae		6										9
Streptococcus species		1	2					2				7

1. Only organisms with 5 or more reports are included in this table.
2. MRSA 4.

Table 6. LabDOSS reports of meningitis and/or CSF isolates, by organism and age group

	< 1 month	1-11 months	1-4 years	5-14 years	15-24 years	25-34 years	55-64 years	65-74 years	Total
Cryptococcus neoformans						1			1
Cryptococcus neoformans var. *gattii*								1	1
Cryptococcus neoformans var. *neoforms*						1			1
Neisseria meningitidis				1					1
Staphylococcus aureus			1						1
Staphylococcus coagulase negative					1		1		2
Streptococcus pneumoniae	1	2	1				1		5

Isolates from sites other than blood or CSF

Joint fluid: Two reports were received this period involving *Staphylococcus aureus.*

Peritoneal dialysate: Five reports were received this period. Included was 1 *Staphylococcus aureus,* 1 *Enterococcus faecalis,* 2 *Escherichia coli,* and 1 *Pseudomonas aeruginosa.*

Other: A total of two reports were received. Included was 1 *Candida* species and 1 *Klebsiella* species.

Virology and Serology Reporting Scheme

The Virology and Serology Reporting Scheme, LabVISE, is a sentinel reporting scheme. Twenty-one laboratories contribute data on the laboratory identification of viruses and other organisms. Data are collated and published in *Communicable Diseases Intelligence* each fortnight. 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* 20 1996, pages 9-12.

There were 2,421 reports received in the *CDI* Virology and Serology Reporting Scheme this period (Tables 7, 8 and 9).

Ross River virus was reported for 540 patients this fortnight. Diagnosis was by IgM detection (481), single high titre (41) and fourfold change in titre (18). Four hundred and fifty-three of the patients (84%) were aged between 25 and 64 years. Reports have continued to decline since the peak in February. The number of reports received so far for 1996 is the highest recorded for any year of the scheme (Figure 10).

Thirty-one reports of **Barmah Forest virus** were reported this period. Diagnosis was by IgM detection (30) and fourfold change in titre (one). Included were 19 males and 12 females. Twenty-five reports (81%) were from Queensland, 4 from Western Australia, one from New South Wales and one from the Northern Territory. The number of reports is average for the time of year.

Parainfluenza virus type 1 was reported for nine patients this period. Diagnosis was by antigen detection (6) and virus isolation (3). All patients were below the age of four years. Reports have continued to increase in recent months (Figure 11).

Repiratory syncytial virus was reported for 41 patients this period. Diagnosis was by antigen detection (27), virus isolation (11), single high titre (2) and fourfold change in titre (one). Thirty-nine patients were below the age of four years. Reports for 1996 are above average for the time of year (Figure 12).

Seven reports of **Norwalk agent** were received this fortnight, all were diagnosed by antigen detection. Included were six females and one male. All the reports came from Victoria.

Figure 10. Ross River virus laboratory reports, 1982 to 1996, by year of specimen collection

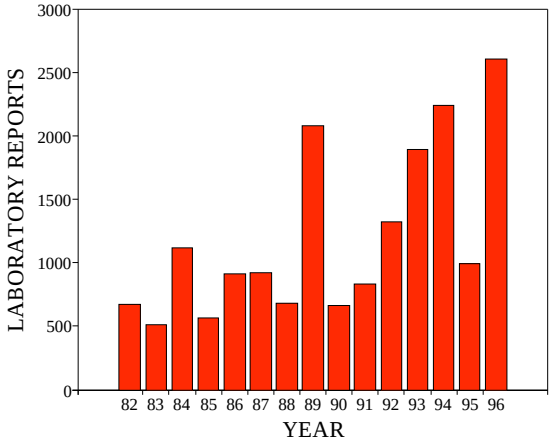


Figure 11. Parainfluenza virus types 1, 2 and 3 laboratory reports, 1996, by month of specimen collection

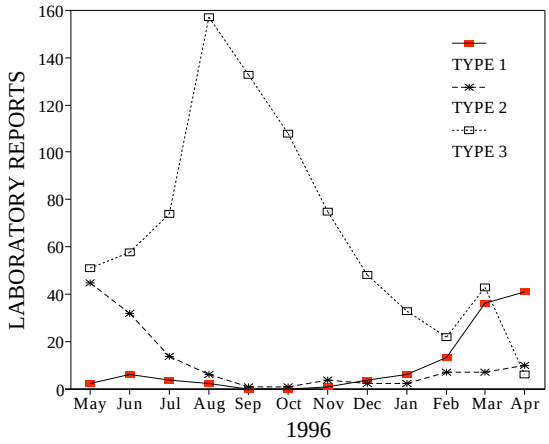


Figure 12. Respiratory syncytial virus laboratory reports, 1991 to 1995 average and 1996, by month of specimen collection

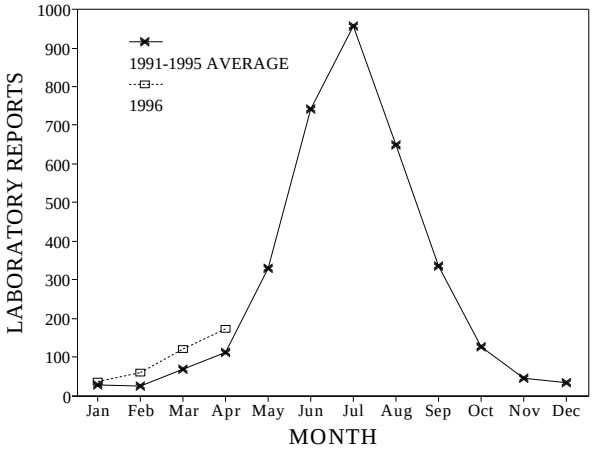


Table 7. Virology and serology laboratory reports by State or Territory[1] for the reporting period 2 May to 15 May 1996, historical data[2], and total reports for the year

	State or Territory [1]							Total this fortnight	Historical data 2	Total reported this year
	NSW	NT	Qld	SA	Tas	Vic	WA			
MEASLES, MUMPS, RUBELLA										
Measles virus							1	1	46.5	27
Mumps virus			1					1	5.3	19
Rubella virus			33				1	34	19.0	256
HEPATITIS VIRUSES										
Hepatitis A virus	3	6	12			1	5	27	18.2	223
Hepatitis B virus	2	5	75			13	14	109	118.2	562
Hepatitis C virus	14	19	109		12	24	118	296	254.2	1,316
ARBOVIRUSES										
Ross River virus	23	3	459		1	3	51	540	131.8	2,633
Barmah Forest virus	1	1	25				4	31	20.5	125
Kunjin virus							1	1	.0	4
Flavivirus (unspecified)			1					1	2.0	20
ADENOVIRUSES										
Adenovirus type 3						2		2	2.5	55
Adenovirus type 5							1	1	.3	2
Adenovirus type 7						2		2	.3	17
Adenovirus type 40							6	6	.0	11
Adenovirus not typed / pending	2		3			4	4	13	55.0	612
HERPES VIRUSES										
Herpes simplex virus type 1	5	2	128	1	3	54	50	243	185.7	2,652
Herpes simplex virus type 2	5	11	145		2	45	79	287	220.5	2,633
Herpes simplex not typed / pending	3		4			3	1	11	61.5	275
Cytomegalovirus	3	2	21		2	16	7	51	79.0	692
Varicella-zoster virus	4	1	28		2	19	9	63	50.5	563
Epstein-Barr virus	12	3	89	1		10	19	134	71.2	871
OTHER DNA VIRUSES										
Parvovirus	1		2			5	2	10	1.5	54
PICORNA VIRUS FAMILY										
Coxsackievirus A16						1		1	1.5	1
Rhinovirus (all types)			2			9	2	13	31.7	269
Enterovirus not typed / pending	1	1	9			3	11	25	39.5	390
ORTHO / PARAMYXOVIRUSES										
Influenza A virus		1	1			1		3	42.3	78
Influenza B virus						2		2	6.8	25
Parainfluenza virus type 1	1		3			5		9	30.7	106
Parainfluenza virus type 3			1			2		3	22.5	276
Respiratory syncytial virus	4		5		1	22	9	41	119.2	586
Paramyxovirus (unspecified)						2		2	.0	3
OTHER RNA VIRUSES										
HIV-1	1	1	11			1		14	5.5	65
Rotavirus	3				2	1	2	8	38.5	331
Calici virus						1		1	.0	5
Norwalk agent						7		7	.3	28
OTHER										
Chlamydia trachomatis not typed	8	111	97		2	10	47	275	98.5	1,512
Chlamydia psittaci						6		6	6.0	58
Mycoplasma pneumoniae			14			10	5	29	26.2	233
Coxiella burnetii (Q fever)	3		1					4	20.2	59
Streptococcus group A	2	12	37					51	15.8	202
Bordetella pertussis						16	4	20	11.2	215

Table 7. Virology and serology laboratory reports by State or Territory[1] for the reporting period 2 May to 15 May 1996, historical data[2], and total reports for the year, continued

	State or Territory [1]							Total this fortnight	Historical data 2	Total reported this year
	NSW	NT	Qld	SA	Tas	Vic	WA			
Bordetella species			8					8	3.0	137
Legionella pneumophila						1		1	.0	4
Cryptococcus species			1					1	1.7	4
Leptospira interrogans			2					2	.0	2
Leptospira species	1		3					4	3.2	21
Treponema pallidum	1	2	3			2		8	16.5	134
Entamoeba histolytica						1		1	1.0	12
Toxoplasma gondii						1		1	9.0	11
Schistosoma species						6	10	16	1.5	151
Echinococcus granulosus							1	1	2.7	2
TOTAL	103	181	1333	2	27	311	464	2,421	1,898.5	18,542

1. State or Territory of postcode, if reported, otherwise State or Territory of reporting laboratory.
2. The historical data are the averages of the numbers of reports in 6 previous 2 week reporting periods: the corresponding periods of the last

Table 8. Virology and serology laboratory reports by contributing laboratories for the reporting period 2 May to 15 May 1996

	Encephalitis	Other CNS	Respiratory	Gastrointestinal	Hepatic	Skin	Eye	Muscle/joint	Genital	Other/unknown	TOTAL
MEASLES, MUMPS, RUBELLA											
Measles virus						1					1
Mumps virus										1	1
Rubella virus						4				30	34
HEPATITIS VIRUSES											
Hepatitis A virus					8					19	27
Hepatitis B virus					19					90	109
Hepatitis C virus					50					246	296
ARBOVIRUSES											
Ross River virus						38		179		323	540
Barmah Forest virus			1			1		4		25	31
Kunjin virus										1	1
Flavivirus (unspecified)										1	1
ADENOVIRUSES											
Adenovirus type 3							2				2
Adenovirus type 5										1	1
Adenovirus type 7									1	1	2
Adenovirus type 40				4						2	6
Adenovirus not typed/pending			2	4			2			5	13
HERPES VIRUSES											
Herpes simplex virus type 1		1	6			122	12		64	38	243
Herpes simplex virus type 2						85			164	38	287
Herpes simplex not typed/pending				1		2			2	6	11
Cytomegalovirus			6	2	2			2		39	51
Varicella-zoster virus	1					34				28	63

Table 8. Virology and serology laboratory reports by contributing laboratories for the reporting period 2 May to 15 May 1996, continued

	Encephalitis	Other CNS	Respiratory	Gastrointestinal	Hepatic	Skin	Eye	Muscle/joint	Genital	Other/unknown	TOTAL
Epstein-Barr virus			22		4	2				106	134
OTHER DNA VIRUSES											
Parvovirus						2		2		6	10
PICORNA VIRUS FAMILY											
Coxsackievirus A16						1					1
Rhinovirus (all types)			6							7	13
Enterovirus not typed / pending			5	8		2				10	25
ORTHO / PARAMYXOVIRUSES											
Influenza A virus										3	3
Influenza B virus			2								2
Parainfluenza virus type 1			8							1	9
Parainfluenza virus type 3			2							1	3
Respiratory syncytial virus			35							6	41
Paramyxovirus (unspecified)			2								2
OTHER RNA VIRUSES											
HIV-1										14	14
Rotavirus				8							8
Calici virus				1							1
Norwalk agent				7							7
OTHER											
Chlamydia trachomatis not typed							2		199	74	275
Chlamydia psittaci			3							3	6
Mycoplasma pneumoniae	1		15							13	29
Coxiella burnetii (Q fever)										4	4
Streptococcus group A								1		50	51
Bordetella pertussis			18							2	20
Bordetella species			7							1	8
Legionella pneumophila			1								1
Cryptococcus species										1	1
Leptospira interrogans										2	2
Leptospira species										4	4
Treponema pallidum						1				7	8
Entamoeba histolytica										1	1
Toxoplasma gondii										1	1
Schistosoma species										16	16
Echinococcus granulosus										1	
TOTAL	2	1	141	35	83	295	18	188	430	1228	2421

Table 9. Laboratory reports by contributing laboratory for the reporting period 2 May to 15 May 1996

STATE OR TERRITORY	LABORATORY	REPORTS
New South Wales	Royal Prince Alfred Hospital, Camperdown	21
Queensland	Queensland Medical Laboratory, West End	1471
Tasmania	Northern Tasmanian Pathology Service, Launceston	1
	Royal Hobart Hospital, Hobart	23
Victoria	Microbiological Diagnostic Unit, University of Melbourne	4
	Monash Medical Centre, Melbourne	51
	Royal Children's Hospital, Melbourne	78
	Unipath Laboratories	24
	Victorian Infectious Diseases Reference Laboratory, Fairfield Hospital	153
Western Australia	PathCentre Virology, Perth	300
	Western Diagnostic Pathology	295
TOTAL		2421