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Communicable Diseases Intelligence

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Contents:

VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME:

In this period (21 June to 4 July 1990) 1236 reports were processed.

There were 2 reports of Q fever in the period. Exposure details for one case describe the 52-year-old male as working with sheep.

Respiratory syncytial virus activity continues to increase, with a further 317 cases reported for this period. CDI 90/13 presented a graph showing the above-average reporting of RSV since about February 1990.

There were 6 reports of rubella. They include 2 pregnant women, one a 29-year-old and the other 21-years-old. A third case involved foetal death in utero.

Twelve cases of hepatitis C were reported.

Editorial Staff: Mr Geoff Davis, Ms Evon Bowler

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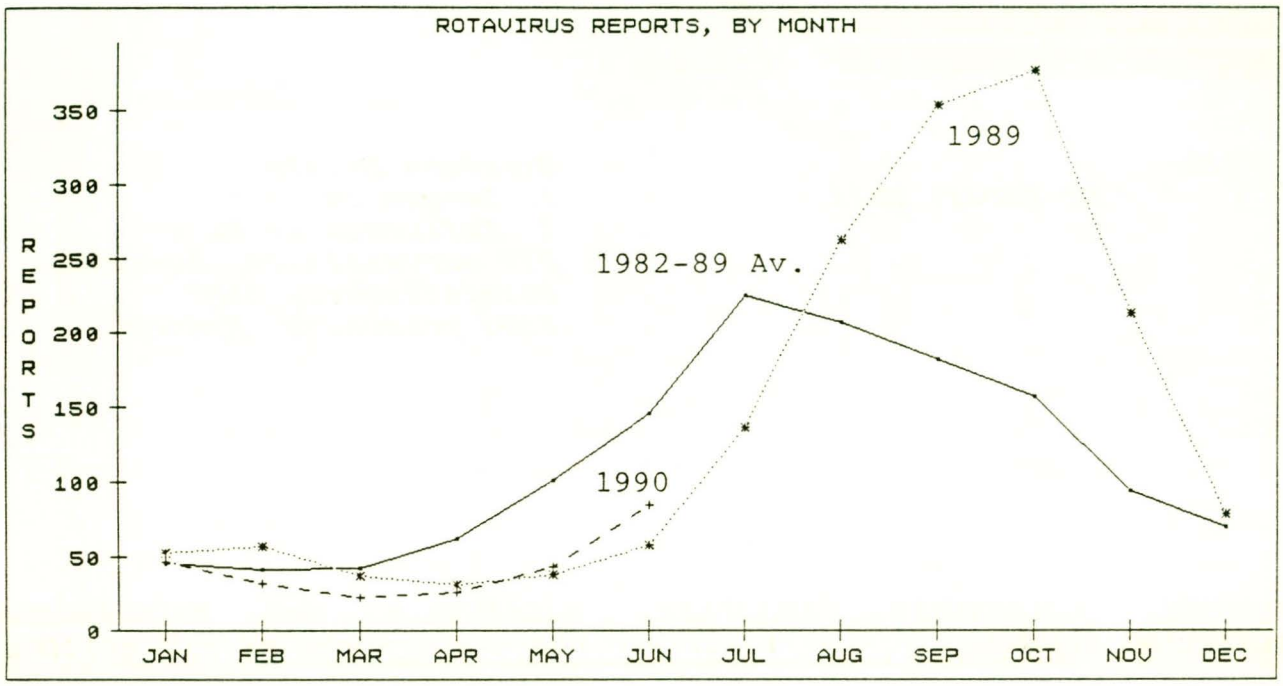
- Contributions are solicited, and do not preclude later publication elsewhere.

- Figures given may be subject to revision.

Rotavirus activity showed a significant increase in the period with 101 cases reported. The figure below indicates this increase is consistent with the annual trends exhibited by this virus and that monthly reports to date are below the 1982 - 1989 average.



OVERSEAS BRIEFS

1. DENGUE IN FIJI

Dengue activity continues in Fiji, with the 39 cases reported for the fortnight ending 12 May indicating that the recent comment regarding a likely waning (CDI 90/13) may possibly have been premature.

2. INFLUENZA IN FIJI

Influenza activity continues apace in Fiji with a further 4 682 cases reported for the fortnight ending 12 May. This brings the total number of cases recorded for the calendar year to 40 088.

AUSTRALIAN HIV SURVEILLANCE REPORT: 15 JUNE 1990

The National Centre in HIV Epidemiology and Clinical Research reports that as at 18 May 1990, a total of 1891 cases of AIDS had been reported in Australia.

For the most recent reporting period, 21 April to 18 May (weeks 17-20), 23 new cases of AIDS were reported in Australia.

Table 1: New cases of AIDS and deaths from AIDS for the period 21 April to 18 May (weeks 17 - 20), and cumulative cases and deaths to 18 May 1990, by sex and State in which initial diagnosis was made.

State/ Territory	1990 Weeks 17 - 16				1982 - 1990 Cumulative to 18 May 90			
	Cases		Deaths		Cases		Deaths	
	M	F	M	F	M	F	M	F
NSW	14	0	13	1	1148	33	728	24
VIC	5	0	3	0	380	9	196	4
QLD	0	1	1	0	129	6	76	4
WA	0	0	0	0	80	6	40	2
SA	1	0	2	0	60	2	33	1
NT	0	0	0	0	2	0	1	0
TAS	1	0	1	0	10	1	4	1
ACT	1	0	0	0	25	0	12	0
Total	22	1	20	1	1834	57	1090	36

Table 2: Notifications of persons newly diagnosed as HIV antibody positive, and cumulative since the introduction of HIV antibody testing, by sex and State/Territory of notification.

State/ Territory	1990 Weeks 17 - 20			1985 - 1990 Cumulative to 18 May 90			
	M	F	TOTAL	M	F	NK	TOTAL
NSW	-	-	N/A #	5,250	293	2,766	8,309 +
VIC	18	0	18	2,034	12	276	2,322
QLD	5	1	6	861	31	0	892
WA	10	2	12	499	28	0	527
SA	4	3	7	333	27	34	394
NT	0	0	0	47	3	0	50
TAS	3	0	3	49	2	0	51
ACT	1	0	1	8	0	97	105
Total	41	6	47	9,081	396	3,173	12,650

NK Sex not known
Notifications not available
+ Cumulative to 30 June 1989; see 23 March 1990 Report for further details

PARAINFLUENZA VIRUS INFECTIONS - CHILDREN'S HOSPITAL CAMPERDOWN, NSW

(Reproduced with acknowledgement from Monthly Infectious Diseases Report, J Eagles, May 1990, editor D Isaacs, Royal Alexander Hospital for Children, Camperdown NSW)

This year there has been an increase in the number of parainfluenza virus type 1 isolations at this hospital compared to recent years, and 7 children with croup due to this virus have required intubation. Parainfluenza viruses belong to the family Paramyxoviridae, as do mumps, measles and respiratory syncytial virus. They are single-stranded RNA viruses, variable in size, with an average diameter of 150-200nm, and are approximately spherical in shape. From the envelope of the parainfluenza virus project spikes of two different glycoproteins. The HN glycoprotein is responsible for the haemagglutination and neuraminidase activities (c.f. influenza viruses where these activities are on separate structures), and the F glycoprotein is associated with the haemolytic and cell fusing activities. During infection, antibodies are formed against both these glycoproteins.

The parainfluenza viruses are divided into four distinct antigenic types: 1, 2, 3 and 4, which also have distinct clinical and epidemiological characteristics. Primary infections with types 1 and 2 are rare before 4 months of age (possible maternal antibody is protective up to this time): however between the ages of 6 to 30 months, they can cause croup, which may be severe, especially in type 1 infections. The peak incidence is in autumn, with type 1 causing outbreaks in even-numbered years in the northern hemisphere and at this hospital since 1984 (see Table 1. below). Type 2 outbreaks are reported in odd-numbered years. In developing countries primary infection with parainfluenza virus type 1 or 2 is more likely to cause pneumonia or tracheobronchitis than croup. (A croup-like syndrome is more commonly caused by measles or diphtheria).

Infections with parainfluenza virus type 3, unlike types 1 and 2, may occur in the first months of life, and up to 24 months of age more commonly cause pneumonia and bronchiolitis. In older children type 3 infection causes croup. Type 3 infections occur every year. the peak incidence in Sydney being in spring.

Reinfection with all types occurs, but usually the succeeding illnesses are progressively less severe. Infection with parainfluenza virus type 4 is mild or even asymptomatic, and principally for technical reasons, is usually not isolated at this hospital.

The spread of parainfluenza virus is by direct person-to-person contact or by large droplets, with an incubation period of 3 to 6 days. Serological surveys in many countries indicate that these viruses are ubiquitous except in some remote populations e.g. remote tribes in South America.

Parainfluenza virus has a predilection for the respiratory tract, and there is little evidence to suggest that there is direct disease involvement of other organ systems. At least for types 1 and 2, nasal antibody may be a better indicator of immunity than serum antibody titres. Virus-specific IgE antibody and chemical mediators such as histamine may be involve in the pathogenesis of croup or bronchiolitis.

Listed in Table 1 below are the number of parainfluenza virus type 1 and parainfluenza type 2 isolations at RAHC since 1978. The peak isolation period is from March to August. At this hospital, unlike the northern hemisphere, there do not appear to be the outbreaks of parainfluenza virus type 2 in even-numbered years.

The increase in isolates so far this year is being experienced generally in Australia, with the highest number of reports for March ever recorded (CDI 90/8, 90/10). Most of these isolates were from patients with clinical respiratory illness. The clinical diagnoses written on the request forms of 16 specimens from which parainfluenza virus type 1 was isolated in this hospital this year were:-

8 - croup
3 - bronchiolitis
1 - croup and pneumonia
1 - acute respiratory illness
1 - URTI
1 - chest infection
1 - ? viral encephalitis

Numerically however, RSV is far more commonly diagnosed in the laboratory. In the same time period from 1/1/90 to 1/6/90 there were 132 RSV-positive specimens (culture and/or direct immunofluorescence). Parainfluenza virus type 3 has been isolated from 4 patients this year (reflecting the low incidence in summer and autumn).

Diagnosis of parainfluenza virus infection is normally by culture of the virus in monkey kidney cells. The preferred specimen is a nasopharyngeal aspirate (NPA), but a throat swab may suffice if one cannot obtain an NPA. A preliminary positive result of an haemadsorbing virus is usually available in 4 to 5 days. The culture is then sent to the Institute of Clinical Pathology and Medical Research, Westmead, for typing by immunofluorescence.

Direct immunofluorescence for the parainfluenza virus antigens of types 1, 2 or 3 on exfoliated cells in an NPA is possible in urgent circumstances. However the quality of antisera has been less than satisfactory in our experience and that of others (Hallsworth and McDonald, 1985), leading to the possibility of false negative results.

Serological diagnosis, although available using complement fixation testing (CFT) is impractical due to the requirement for paired sera: the first taken during the acute phase of the illness, and the second taken 2 to 3 weeks later. Testing for specific IgM antibody in single serum samples is theoretically possible, but is not commonly performed.

Table 1: Parainfluenza virus isolations RAHC 1978-1990 (Dr L DeSilva)

	Type 1	Type 2
1978	0	1
1979	14	1
1980	0	10
1981	17	1
1982	4	5
1983	4	0
1984	4	6
1985	0	3
1986	3	5
1987	0	1
1988	12	0
1989	0	0
1990*	16	0

* to 1/6/90

REFERENCES

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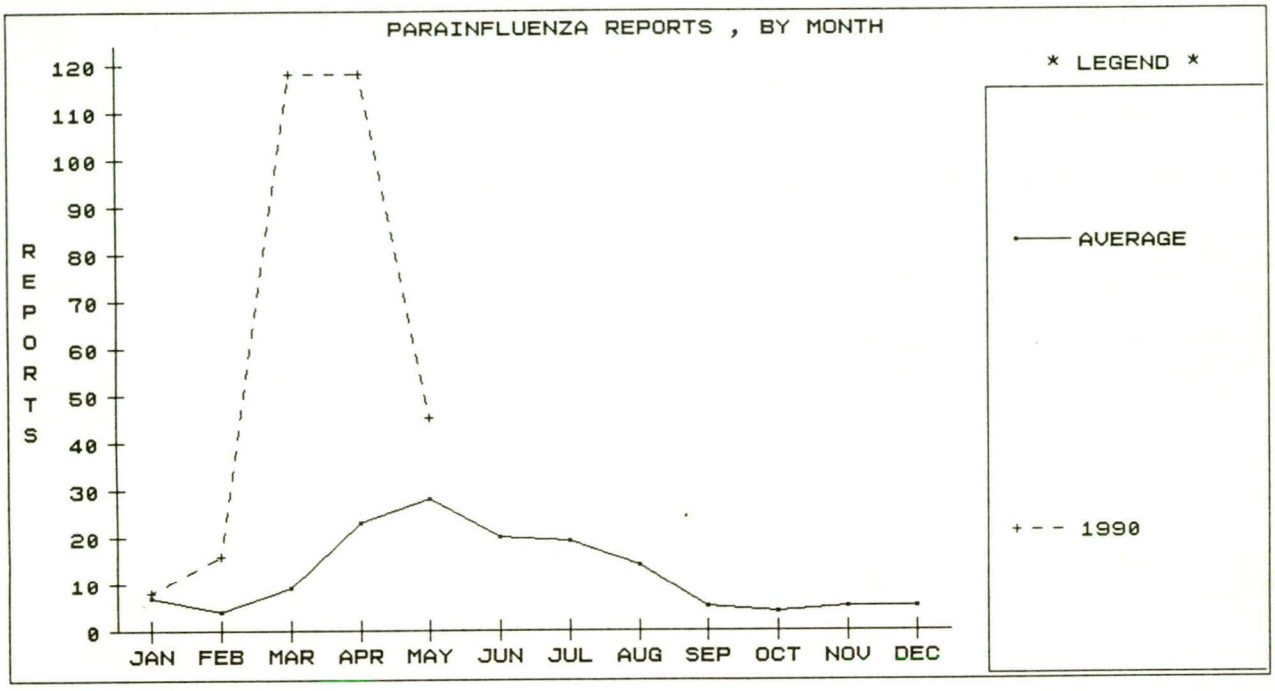
2. Communicable Diseases Intelligence 90/10 (21/5/90) p2.
3. Enders G. Paramyxoviruses; in: Medical Microbiology ed. Baron, S; Addison-Wesley Publishing Company, Inc., 2nd ed, 1986.
4. Glezen WP, Loda FA, Denny FW. Parainfluenza Viruses; in: Viral Infections of Humans - Epidemiology and Control; ed Evans AS; Plenum Publishing Corporation, 3rd ed, 1989.
5. Hallsworth PG and McDonald PJ. Rapid diagnosis of viral infections with fluorescent antisera, Pathology (1985), 17, pp629-632.
6. McLean DM. Parainfluenza viruses; in: Principles and practice of clinical virology; ed. Zuckerman AJ, Banatvala JE and Pattison JR; John Wiley and Sons, 1987.

CDI Editorial Comment

Increasing parainfluenza type 1 activity was first highlighted in CDI 90/8, with the graphical presentation of cases updated in CDI 90/10. The figure below shows activity for April remained, considerably above the average. The recent indicated 'decline' will probably be modified as late reports are received.



FOOD POISONING OUTBREAK, SYDNEY

(Contributed by E Kraa, NSW Department of Health)

On the 23 April 1990 the Food Inspection Branch of the NSW Department of Health received a complaint that thirty people had become ill after consuming a meal at a Sydney club on the 20 April. An investigation was commenced which rapidly disclosed that Sydney rock oysters were the suspect food. Further complaints rapidly followed, culminating in reports alleging 752 cases of food poisoning from 57 different functions at 51 different premises.

All outbreaks appeared to be closely related, with a similar incubation period and similar symptoms. Sydney rock oysters had a significantly higher attack rate than other foods. In a number of cases oysters from the same batch were sold to different premises where they caused similar food poisoning. Most implicated oysters were traced to purification plants on the Georges River.

The outbreaks centred around a period between the 20 April and the 4 May 1990 and followed a period of heavy rainfall in the catchment area of the Georges river in Sydney.

Approximately 1240 people attended nine of the larger functions implicated in the outbreak and it was possible to contact 617 people from these nine functions. Of these 403 reported illness and 131 (33%) reported consulting a doctor.

The average attack rate for those who consumed oysters at these nine functions was 89% with attack rates for oysters ranging from 73% to 100%. The range of time for onset of symptoms was 4 to 70 hours with the majority occurring between 30 and 45 hours. The average time of onset for the nine functions was 38 hours. The average duration of illness from the nine functions was 55 hours with a range of 44 hours to 75 hours.

The predominant symptoms reported by victims were:

diarrhoea	86%
nausea	81%
vomiting	70%
abdominal cramps	70%
fever	56%

These predominant symptoms and incubation period are consistent with a viral gastroenteritis.

Food inspectors obtained ten residue samples of the actual oysters served at three of the functions. All ten failed the NSW bacteriological standard for opened oysters, nine having excess faecal coliforms (> 230 per gram) and two having an excessive Standards Plate Count (>500000 per gram). *Vibrio parahaemolyticus* was detected in three out of six samples and *Vibrio vulnificus* was detected in one sample. No other bacteriological pathogens were detected.

Norwalk virus was detected in five stool specimens and *Vibrio parahaemolyticus* and rotavirus were detected in two separate stool specimens. No other pathogens were detected in the thirty stool specimens collected.

Examination of paired "acute" and "convalescent" sera is not yet complete.

Preliminary results indicate that the majority of victims suffered a viral gastroenteritis caused by Norwalk virus with some victims suffering *Vibrio parahaemolyticus* infection due to the consumption of oysters contaminated by urban run-off containing gross faecal contamination.

The subsidence of the outbreak around 4 May can be linked to the closure of the Georges river to the harvesting of oysters for most of May and the rapid decline in the consumption of oysters by the public as a result of the wide publicity surrounding this recent outbreak.

CDI Editorial Comment

It is notable that this recent outbreak of food poisoning is the third to be reported in CDI in recent times as a viral gastroenteritis due to a Norwalk-like virus. The earlier reports (CDI 90/5, 90/12) record that the implicated foods were sandwiches and a salad respectively.

Norwalk viruses commonly occur worldwide and demonstrate taxonomic affinity with the caliciviruses. They have been implicated as the etiological agent of about one-third of the non-bacterial gastroenteriirits outbreaks. Man is the only known reservoir. Other morphologically similar viruses (about 27-32 nm in diameter) have also been found in the stools of children and adults suffering diarrhoeal disease. The most common mode of transmission is probably faecal-oral.

Although acute infection with Norwalk viruses usually leads to the development of an immune response, this does not appear to provide protection against symptomatic reinfection.

References

1. Benenson AS editor Control of Communicable Diseases in Man 14th edition 1985.
2. Belshe RB editor Textbook of Human Virology 1984.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 21/06/90 TO 04/07/90

1. CODE 018 - MICROBIOL DIAG UNIT, UNI MELB (VIC)
2. CODE 019 - FAIRFIELD HOSP (VIC)
3. CODE 065 - STATE HEALTH LAB (WA)
4. CODE 066 - PRINCESS MARGARET HOSP (WA)
5. CODE 110 - INST OF MED & VET SCIENCE (SA)
6. CODE 111 - ROYAL CHILDRENS HOSP (VIC)
7. CODE 112 - INST CLINICAL PATH & MED RES (NSW)
8. CODE 113 - PRINCE HENRY/PRINCE OF WALES HOSP (NSW)
9. CODE 114 - ROYAL ALEXAND RA CHILDRENS HOSP (NSW)
10. CODE 115 - STATE HEALTH LAB (QLD)
11. CODE 116 - WODEN VALLEY HOSP (ACT)
12. CODE LDS - LAUNCESTONDIAGNOSTIC SERVICES (TAS)
13. CODE RHH - ROYAL HOBART HOSPITAL (TAS)
14. CODE TPL - TOOWOOMBA PATHOLOGY LAB (QLD)

	018	019	065	066	111	112	113	114	115	116	LDS	RHH	TOTAL
0100 ADENOVIRUS NOT TYPED	0	0	4	8	10	0	2	0	6	0	0	0	30
0101 ADENOVIRUS TYPE 1	0	3	0	0	0	0	0	0	0	0	0	0	3
0102 ADENOVIRUS TYPE 2	0	1	0	0	0	0	0	0	0	0	0	0	1
0103 ADENOVIRUS TYPE 3	0	1	0	0	0	0	0	0	0	1	0	0	2
0111 ADENOVIRUS TYPE 11	0	0	0	0	0	1	0	0	0	0	0	0	1
0137 ADENOVIRUS TYPE 37	0	1	0	0	0	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	0	2	0	0	7	0	2	0	0	0	0	0	11
0301 PARAINFLUENZA VIRUS TYPE 1	0	0	0	1	14	0	0	1	0	0	0	0	16
0302 PARAINFLUENZA VIRUS TYPE 2	0	0	0	0	6	0	0	0	0	0	0	0	6
0303 PARAINFLUENZA VIRUS TYPE 3	0	0	0	1	3	2	0	1	0	1	0	0	8
0399 PARAINFLUENZA VIRUS TYPING PEN	0	0	2	0	2	0	0	0	2	0	0	0	6
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	34	0	17	83	21	12	52	63	33	0	2	317
0500 RHINOVIRUS (ALL TYPES)	0	4	1	0	17	0	0	0	0	0	0	0	22
0600 MYCOPLASMA PNEUMONIAE	0	0	0	0	3	3	0	0	0	0	1	0	7
0809 COXSACKIEVIRUS A9	0	1	0	0	0	0	0	0	0	0	0	0	1
1006 ECHOVIRUS TYPE 6	0	0	0	0	0	0	0	1	0	0	0	0	1
1011 ECHOVIRUS TYPE 11	0	0	0	0	0	2	0	2	0	1	0	0	5
1014 ECHOVIRUS TYPE 14	0	0	0	0	0	0	0	1	0	1	0	0	2
1025 ECHOVIRUS TYPE 25	0	0	0	0	0	1	0	0	0	0	0	0	1
1028 ECHOVIRUS TYPE 28 = RHINO VIRU	0	0	0	0	0	0	0	1	0	0	0	0	1
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	0	3	0	0	0	0	0	3
1101 POLIOVIRUS TYPE 1	0	1	0	0	0	2	0	0	0	0	0	0	3
1102 POLIOVIRUS TYPE 2	0	1	0	0	0	2	0	0	0	0	0	0	3
1103 POLIOVIRUS TYPE 3	0	1	0	0	0	0	0	0	0	0	0	0	1
1200 MUMPS VIRUS	0	1	0	0	0	1	0	0	0	0	0	0	2
1300 HERPES VIRUS GROUP - NOT TYPED	0	2	2	0	0	0	1	0	0	5	0	0	10
1301 HERPES SIMPLEX VIRUS - NOT TYP	0	0	0	3	0	14	0	0	0	0	3	0	20
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	4	4	0	2	0	2	0	0	2	0	0	14
1303 VARICELLA-ZOSTER VIRUS	0	7	2	0	0	1	3	0	0	0	0	0	13
1306 HERPES SIMPLEX TYPE 1	0	41	37	0	0	4	0	2	34	0	0	0	118
1307 HERPES SIMPLEX TYPE 2	0	38	50	0	0	4	0	0	16	0	0	0	108
1399 HERPES VIRUS TYPING PENDING	0	0	0	0	2	0	1	0	1	0	0	0	4
1401 COXIELLA BURNETII	0	1	0	0	0	1	0	0	0	0	0	0	2
1502 PICORNIA VIRUS - NOT TYPED = E	0	0	11	0	0	0	6	0	17	0	0	0	34
1521 MEASLES VIRUS	0	2	1	0	0	0	0	0	0	0	0	0	3
1522 RUBELLA VIRUS	0	5	1	0	0	0	0	0	0	0	0	0	6
1532 HEPATITIS B ANTIGEN	0	13	15	0	1	34	1	1	31	8	0	0	104
1533 HEPATITIS B ANTIBODY	0	0	0	0	0	0	0	0	0	1	0	0	1
1534 HEPATITIS B ANTIGEN AND ANTIBO	0	0	0	0	0	0	0	0	0	1	0	0	1
1535 HEPATITIS A ANTIBODY	0	2	0	0	0	1	1	0	0	0	0	0	4
1536 HEPATITIS C VIRUS	0	0	2	0	0	0	9	0	0	1	0	0	12
1541 CHLAMYDIA A - C. TRACHOMATIS	4	0	38	3	0	19	0	1	39	7	7	1	119
1556 CMV - CYTOMEGALOVIRUS	0	31	2	1	12	7	2	5	14	2	1	0	77
1562 REOVIRUS (ALL TYPES)	0	0	0	0	0	1	0	0	0	0	0	0	1
1564 ROTAVIRUS	0	5	0	67	29	0	0	0	0	0	0	0	101
1599 ENTEROVIRUS TYPING PENDING	0	0	0	0	8	0	10	3	0	0	0	0	21
9992 ROSS RIVER VIRUS	0	2	3	0	0	0	0	0	0	0	0	0	5
9994 SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL	4	204	175	101	199	121	55	72	223	64	12	3	1233

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES BY STATE OF CONTRIBUTING LABORATORY

PERIOD 21/06/90 TO 04/07/90

NSW: ICPMR; PHH POW; RACH; ST GEORGE HOSP, KOGARAH; ROYAL NEWCASTLE HOSP.
VIC: FAIRFIELD; RCH; MDU, UNI MELB
QLD: STATE LAB, BRIS; TOOWOOMBA PATH LAB; ROYAL BRIS HOSP.
WA: STATE LAB, PERTH; PMH.
SA: IMVS.
TAS: ROYAL HOBART HOSP; DIAGNOSTIC SERVICES, LAUNCESTON; LAUNCESTON GEN HOSP; DIAGNOSTIC SERVICES, HOBART; HOBART PATH; MERSEY GEN HOSP, LATROBE.
ACT: WVH.

		NSW	VIC	QLD	WA	TAS	ACT	TOTAL
0100	ADENOVIRUS NOT TYPED	2	10	6	12	0	0	30
0101	ADENOVIRUS TYPE 1	0	3	0	0	0	0	3
0102	ADENOVIRUS TYPE 2	0	1	0	0	0	0	1
0103	ADENOVIRUS TYPE 3	0	1	0	0	0	1	2
0111	ADENOVIRUS TYPE 11	1	0	0	0	0	0	1
0137	ADENOVIRUS TYPE 37	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	2	9	0	0	0	0	11
0301	PARAINFLUENZA VIRUS TYPE 1	1	14	0	1	0	0	16
0302	PARAINFLUENZA VIRUS TYPE 2	0	6	0	0	0	0	6
0303	PARAINFLUENZA VIRUS TYPE 3	3	3	0	1	0	1	8
0399	PARAINFLUENZA VIRUS TYPING PEN	0	2	2	2	0	0	6
0400	RESPIRATORY SYNCYTIAL VIRUS (R	85	117	63	17	2	33	317
0500	RHINOVIRUS (ALL TYPES)	0	21	0	1	0	0	22
0600	MYCOPLASMA PNEUMONIAE	3	3	0	0	1	0	7
0809	COXSACKIEVIRUS A9	0	1	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	1	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	4	0	0	0	0	1	5
1014	ECHOVIRUS TYPE 14	1	0	0	0	0	1	2
1025	ECHOVIRUS TYPE 25	1	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	1	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	3	0	0	0	0	0	3
1101	POLIOVIRUS TYPE 1	2	1	0	0	0	0	3
1102	POLIOVIRUS TYPE 2	2	1	0	0	0	0	3
1103	POLIOVIRUS TYPE 3	0	1	0	0	0	0	1
1200	MUMPS VIRUS	1	1	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	1	2	0	2	0	5	10
1301	HERPES SIMPLEX VIRUS - NOT TYP	14	0	0	3	3	0	20
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	2	6	0	4	0	2	14
1303	VARICELLA-ZOSTER VIRUS	4	7	0	2	0	0	13
1306	HERPES SIMPLEX TYPE 1	6	41	34	37	0	0	118
1307	HERPES SIMPLEX TYPE 2	4	38	16	50	0	0	108
1399	HERPES VIRUS TYPING PENDING	1	2	1	0	0	0	4
1401	COXIELLA BURNETII	1	1	0	0	0	0	2
1502	PICORNIA VIRUS - NOT TYPED = E	6	0	17	11	0	0	34
1521	MEASLES VIRUS	0	2	0	1	0	0	3
1522	RUBELLA VIRUS	0	5	0	1	0	0	6
1532	HEPATITIS B ANTIGEN	36	14	31	15	0	8	104
1533	HEPATITIS B ANTIBODY	0	0	0	0	0	1	1
1534	HEPATITIS B ANTIGEN AND ANTIBO	0	0	0	0	0	1	1
1535	HEPATITIS A ANTIBODY	2	2	0	0	0	0	4
1536	HEPATITIS C VIRUS	9	0	0	2	0	1	12
1541	CHLAMYDIA A - C. TRACHOMATIS	20	4	39	41	8	7	119
1556	CMV - CYTOMEGALOVIRUS	14	43	14	3	1	2	77
1562	REOVIRUS (ALL TYPES)	1	0	0	0	0	0	1
1564	ROTAVIRUS	0	34	0	67	0	0	101
1599	ENTEROVIRUS TYPING PENDING	13	8	0	0	0	0	21
9992	ROSS RIVER VIRUS	0	2	0	3	0	0	5
9994	SMALL VIRUS (LIKE) PARTICLE	1	0	0	0	0	0	1
TOTAL		248	407	223	276	15	64	1233

NOTE: DIRECT COMPARISION BETWEEN STATES IS NOT POSSIBLE SINCE:
- SOME STATES HAVE MORE THAN ONE CONTRIBUTING LABORATORY; AND
- INTERSTATE REFERRRALS OCCUR REGULARLY.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1

PERIOD 21/06/90 TO 04/07/90

1. CODE 00, 99 ..... - NO ILL OR DATA
2. CODE 01, 02, 11, 12 - RESPIRATORY
3. CODE E3 ..... - ENCEPHALITIS
4. CODE M3 ..... - MENINGITIS
5. CODE 04 ..... - PARALYSIS
6. CODE 05, 13 ..... - CNS OTHER UNSPEC
7. CODE 07, 49 - GASTRO INTESTINAL
8. CODE 17, 47 - HEPATIC
9. CODE 19 ... - CVS
10. CODE 89 ... - URINARY TRACCT
11. CODE 06 ... - SKIN MUCOUS

		1	2	3	4	5	6	7	8	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	0	8	0	0	0	2	16	0	0	1	27
0101	ADENOVIRUS TYPE 1	0	3	0	0	0	0	0	0	0	0	3
0102	ADENOVIRUS TYPE 2	0	1	0	0	0	0	0	0	0	0	1
0103	ADENOVIRUS TYPE 3	0	1	0	0	0	0	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	0	1	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	6	0	0	0	0	2	0	0	0	8
0301	PARAINFLUENZA VIRUS TYPE 1	0	15	0	0	0	0	0	0	0	1	16
0302	PARAINFLUENZA VIRUS TYPE 2	0	6	0	0	0	0	0	0	0	0	6
0303	PARAINFLUENZA VIRUS TYPE 3	1	7	0	0	0	0	0	0	0	0	8
0399	PARAINFLUENZA VIRUS TYPING PEN	1	5	0	0	0	0	0	0	0	0	6
0400	RESPIRATORY SYNCYTIAL VIRUS (R	7	300	0	0	0	0	1	0	0	1	309
0500	RHINOVIRUS (ALL TYPES)	1	16	0	0	1	0	0	0	0	0	18
0600	MYCOPLASMA PNEUMONIAE	1	5	0	0	0	0	0	0	0	0	6
0809	COXSACKIEVIRUS A9	0	0	0	1	0	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	0	0	1	0	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	1	0	0	1	0	0	1	0	1	0	4
1014	ECHOVIRUS TYPE 14	0	0	0	1	0	0	1	0	0	0	2
1025	ECHOVIRUS TYPE 25	1	0	0	0	0	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	0	1	0	0	0	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	0	3	0	0	0	3
1101	POLIOVIRUS TYPE 1	1	0	0	0	0	0	1	0	0	0	2
1102	POLIOVIRUS TYPE 2	1	0	0	0	0	0	1	0	0	0	2
1200	MUMPS VIRUS	1	0	0	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	1	1	0	0	0	0	0	0	3	5
1301	HERPES SIMPLEX VIRUS - NOT TYP	4	3	0	1	0	0	0	0	0	4	12
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	4	1	0	0	0	0	0	1	0	0	6
1303	VARICELLA-ZOSTER VIRUS	2	0	1	0	0	0	0	1	0	7	11
1306	HERPES SIMPLEX TYPE 1	2	4	0	0	0	0	0	1	1	72	80
1307	HERPES SIMPLEX TYPE 2	1	0	0	0	0	0	0	0	0	44	45
1399	HERPES VIRUS TYPING PENDING	1	0	0	0	0	0	0	0	0	3	4
1401	COXIELLA BURNETII	2	0	0	0	0	0	0	0	0	0	2
1502	PICORNIA VIRUS - NOT TYPED = E	5	9	1	3	0	1	11	0	0	1	31
1521	MEASLES VIRUS	1	0	0	0	0	0	0	0	0	2	3
1522	RUBELLA VIRUS	1	0	0	0	0	0	0	0	0	1	2
1532	HEPATITIS B ANTIGEN	52	1	0	0	0	0	0	47	0	0	100
1533	HEPATITIS B ANTIBODY	0	0	0	0	0	0	0	1	0	0	1
1535	HEPATITIS A ANTIBODY	2	0	0	0	0	0	0	2	0	0	4
1536	HEPATITIS C VIRUS	0	0	0	0	0	0	0	12	0	0	12
1541	CHLAMYDIA A - C. TRACHOMATIS	18	1	0	0	0	0	0	0	0	0	19
1556	CMV - CYTOMEGALOVIRUS	3	25	0	0	0	0	1	1	7	1	38
1562	REOVIRUS (ALL TYPES)	1	0	0	0	0	0	0	0	0	0	1
1564	ROTAVIRUS	0	0	0	0	0	0	101	0	0	0	101
1599	ENTEROVIRUS TYPING PENDING	1	2	0	5	0	1	8	0	0	0	17
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	0	1	0	0	0	1
TOTAL		116	421	3	13	1	4	149	66	9	141	923

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2

PERIOD 21/06/90 TO 04/07/90

12. CODE 10 - EYE
13. CODE 59 - GENITAL
14. CODE 39 - ENDOCRINE/SALIVARY GL.
15. CODE 38 - RETICULO-ENDOTHELIAL
16. CODE 29 - MUSCLE/JOINT
17. CODE 69 - CONGENTIAL
18. CODE P8 - PUO
19. CODE G8 - FEVER/MALAISE
20. CODE 09 - OTHER
21. CODE A1 - SIDS

		12	13	14	15	16	17	18	19	20	21	TOTAL
0100	ADENOVIRUS NOT TYPED	2	0	0	0	0	0	1	0	0	0	3
0103	ADENOVIRUS TYPE 3	1	0	0	0	0	0	0	0	0	0	1
0137	ADENOVIRUS TYPE 37	1	0	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	0	0	0	0	0	0	1	1	0	3
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	3	3	2	8
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	3	1	0	4
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	0	1	0	1
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	0	1	0	0	0	1
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	0	0	0	0	1	1
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	0	0	0	0	1	1
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	0	0	0	0	1	1
1200	MUMPS VIRUS	0	0	1	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	3	0	0	0	0	0	0	2	0	5
1301	HERPES SIMPLEX VIRUS - NOT TYP	1	6	0	0	0	0	0	0	1	0	8
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	4	0	0	0	1	1	2	0	8
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	2	0	2
1306	HERPES SIMPLEX TYPE 1	4	29	0	0	0	0	0	1	4	0	38
1307	HERPES SIMPLEX TYPE 2	0	63	0	0	0	0	0	0	0	0	63
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	0	3	0	0	3
1522	RUBELLA VIRUS	0	0	0	0	0	1	0	0	3	0	4
1532	HEPATITIS B ANTIGEN	0	1	0	0	0	0	0	0	3	0	4
1534	HEPATITIS B ANTIGEN AND ANTIBO	0	0	0	0	0	0	1	0	0	0	1
1541	CHLAMYDIA A - C. TRACHOMATIS	8	91	0	0	0	0	0	0	1	0	100
1556	CMV - CYTOMEGALOVIRUS	1	2	1	1	1	2	0	6	24	1	39
1599	ENTEROVIRUS TYPING PENDING	1	0	0	0	0	0	0	2	1	0	4
9992	ROSS RIVER VIRUS	0	0	1	0	2	0	0	1	1	0	5
TOTAL		20	195	7	1	3	3	4	21	50	6	310