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Contents:

Editor *Dr Robert Hall*

VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME

A total of 1247 reports were processed during this period (26 April to 9 May 1990).

There were 7 reports of Ross River virus, with one each from Exmouth, Pinjarra and Bremer Bay (Western Australia), Koondrook (Victoria) and Moama (New South Wales). This has been a very quiet season, which now appears to be near its end. A total of only 347 reports have been received for the period October 1989 to April 1990. This contrasts with over 2000 reports during the previous summer.

Exposure details were provided for 3 of the 9 cases of Q fever. One was described as a meatworker and two were described as abattoir workers. One of the abattoir workers, a 28-year-old male, presented with encephalitis, an unusual complication of the disease.

There were 177 reports of respiratory syncytial virus, bringing the total for the year to 341. This seasonal increase is much greater than the average observed for the years 1982 to 1989 (see figure below), which indicates that there may be a large or early epidemic this winter. Most of the reports for 1990

Editorial Staff: Ms Jenny Hargreaves, Ms Evon Bowler,
Ms Lenore Cupitt, Ms Michelle Low.

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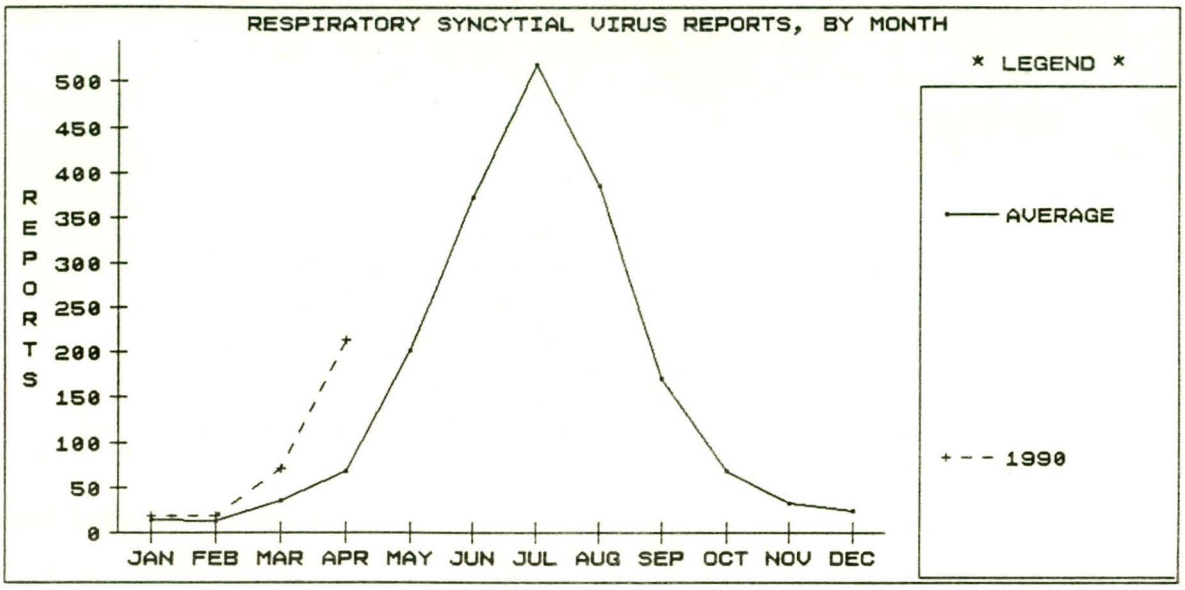
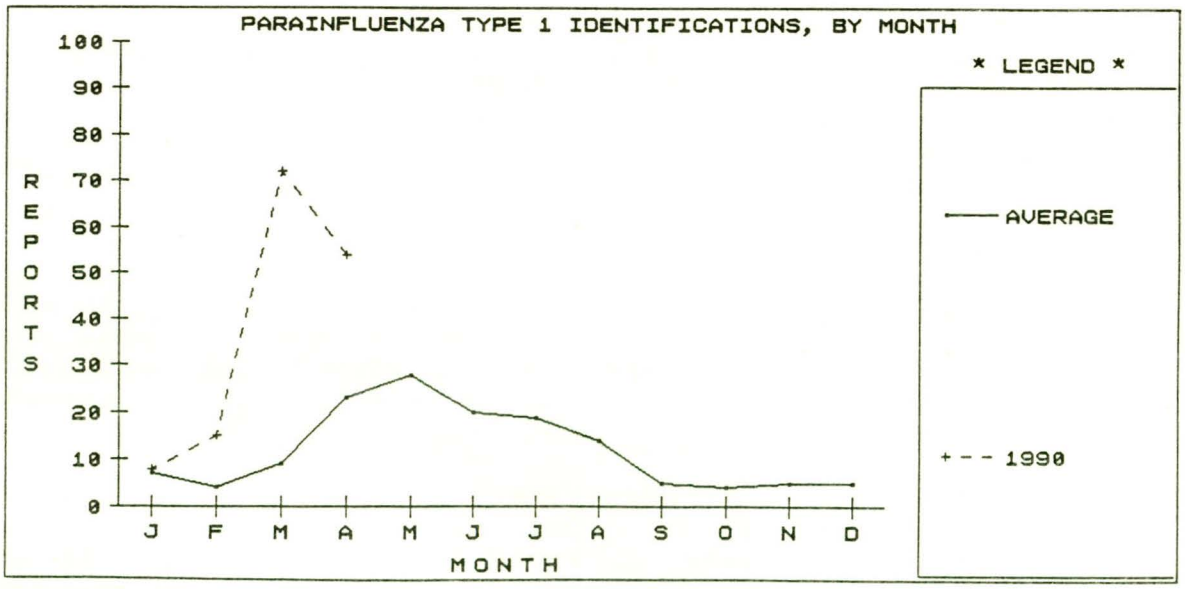
- Figures given may be subject to revision.

have come from laboratories in New South Wales (163), and Queensland (136). There have been 208 cases in males and 116 cases in females (17 unknown). A total of 254 cases have been in children less than 1-year-old with 129 of these in children 3-months-old or less, reflecting the normal epidemiology of this disease. Symptoms reported have been upper and/or lower respiratory tract disease in most of the cases.



The seasonal increase in parainfluenza type 1 is also continuing. Seventy reports were received this fortnight, making a total of 150 for the year and the highest number of reports for March ever recorded. The figure below shows the average number of reports per month for 1982 to 1989, and the reports received so far for 1990. Large numbers of reports have been from laboratories in Queensland (39) and South Australia (57).



The ages of the patients have been under 12 months in 42 cases and between 1 and 4 years in 87 cases. Symptoms reported have been croup and upper and/or lower respiratory tract disease in most cases, but in this reporting period, the virus was isolated from a nasopharyngeal specimen from a five-month-old boy with encephalitis. Parainfluenza type 1 does not usually cause encephalitis so the significance of this isolate is unclear.

There have been 12 influenza isolates reported so far this season. In March, there were 6 influenza A, 1 influenza A subtype H3N2 and no influenza A subtype H1N1 or influenza type B. Isolates for April were 2 influenza A, no influenza A subtype H3N2, no influenza A subtype H1N1 and 3 influenza B. This is a normal number of isolates to have been reported by this time of year.

Several unusual cases of meningitis and encephalitis were reported. Enterovirus type 70 was isolated from a cerebrospinal fluid sample of a 2-month-old girl who had meningitis. This virus more usually causes acute haemorrhagic conjunctivitis and is rare in Australia: it has previously been reported on only one occasion, in 1986. Meningitis was also the unusual syndrome reported for a *Mycoplasma pneumoniae* infection in a male patient (age not specified) and for a herpes simplex virus (not typed) infection in a 74-year-old man. Encephalitis was the reported syndrome for a 6-month-old girl in whose skin vesicles varicella zoster virus was identified and herpes simplex virus was identified in a 4-year-old girl who was suffering recurrent fever after recent viral encephalitis.

A case of dengue fever was reported in a patient who had recently been to Indonesia.

Seven cases of rubella were reported. One was in a 19-year-old pregnant woman who seemed to have been reinfected, after having had the disease in November 1989.

Adenovirus type 2 and rhinovirus were isolated from nasopharyngeal specimens from a 7-month-old boy who suffered Sudden Infant Death Syndrome.

OVERSEAS BRIEFS

1. INFLUENZA IN PAPUA NEW GUINEA

The local outbreaks of influenza which started in early March in and around Goroka are waning after a peak around 15 March, but sporadic cases of influenza A (H1N1) continue to be detected. Infection was noted in all age groups and was associated with severe illness, but no deaths were reported.

2. CHOLERA IN MALAWI

Further details of the Malawi cholera epidemic have been supplied. Revised figures are that between 1 November 1989 and 31 March 1990, 15,258 cases occurred and there were 634 deaths. Many of the cases in the epidemic were more severe than in previous years, possibly due to the predomination of the Ogawa serotype; the Inaba serotype was responsible for previous epidemics. Most of the country's 24 districts were affected.

3. CHOLERA IN ZAMBIA

Between 20 March and 20 April 1990 there were 543 cases of cholera in Zambia, with 28 deaths. Areas of Zambia which are currently considered to be cholera-infected are the Copperbelt Province, the Southern Province and the Lusaka area of the Central Province.

Areas of Angola, Burundi, Cameroon, Cote D'Ivoire, Ghana, Guinea, India, Indonesia, Kenya, Liberia, Malaysia, Mali, Mauritania, Nepal, Niger, Nigeria, Sao Tome and Principe, the United Republic of Tanzania, Vietnam and Zaire are also currently considered to be cholera-infected by the World Health Organization.

4. DENGUE IN MICRONESIA

The State of Kosrae in the Federated States of Micronesia has reported 14 confirmed cases of Dengue. This is the first report of dengue in any area of the Federated States of Micronesia in recent years.

5. DENGUE IN VANUATU

New cases of dengue, serotype 3 are being reported from many islands of Vanuatu. In March, 8 cases of Dengue haemorrhagic fever (DHF) were diagnosed in Vila Central Hospital. DHF usually occurs when a patient is reinfected by the same dengue serotype.

6. PLAGUE IN MADAGASCAR

Cases of plague continued to occur in Madagascar. From 3 to 9 March, a total of 9 cases were reported from the Provinces of Antananarivo, Fianarantsoa and Toamasina.

WHO NATIONAL INFLUENZA REFERENCE CENTRE - INFLUENZA UPDATE

The WHO National Influenza Reference Centre at CSL performs detailed analysis of influenza virus isolates received from Australasian laboratories. One of the more important tasks of the laboratory each year is to produce and collate data relevant to influenza vaccine formulation which is supplied to the Australian Influenza Vaccine Committee and to the World Health Organization. The laboratory also prepares new virus isolates in a form suitable for use as vaccine seeds and this generally involves re-isolation of the virus directly from a clinical sepcimen into specific pathogen free eggs.

Australian laboratories could assist in this important task by sending samples of all influenza isolates to the Centre for detailed analysis and, if possible, retaining the original clinical specimens which yeild influenza isolates pending their analysis.

The National Centre will perform detailed analysis of all influenza strains received. Results will be reported to the submitting laboratories and a regular report will be submitted to *CDI*.

Samples or enquiries should be addressed to:

Alan Hampson
Director
WHO National Influenza Centre
Commonwealth Serum Laboratories
PARKVILLE VIC 3052

Telephone: (03) 389 1340

or to the OIC of the laboratory
Robert Shaw
Telephone: (03) 389 1231

Influenza Update: 18 May 1990

To date two H3 virus isolates have been referred to the Centre for analysis. The first, a Fijian isolate, was received in February form the Wellcome Virus Laboratory, Tamavua Hospital, Suva. The second is an isolate made at IMVS from a clincal specimen taken 6 March 1990 from a 14-year-old German tourist visiting Australia. Analysis with existing reagents suggests that both viruses are more closely related to A/Shanghai/11/87 than to the newer A/Guizhou/54/89 variant.

Isolates have recently been received from the reported H1 influenza outbreak in Papua New Guinea and are currently under analysis.

CDI Editorial Comment

The A/Shanghai/11/87 (H3N2)- like strain is included in the Australian 1990 Influenza Vaccine. Further details about this vaccine and its intended recipients appeared in *CDI* 90/8.

NOSOCOMIAL MEASLES OUTBREAK, BRISBANE, JUNE TO AUGUST 1989

(Based on information received from JL Faoagali, Microbiologist, P de Buse, Director, Intensive Care, R Shepherd, Chairman, Infection control Committee, R Horman, Infection Control Nurse.)

Outbreak Description

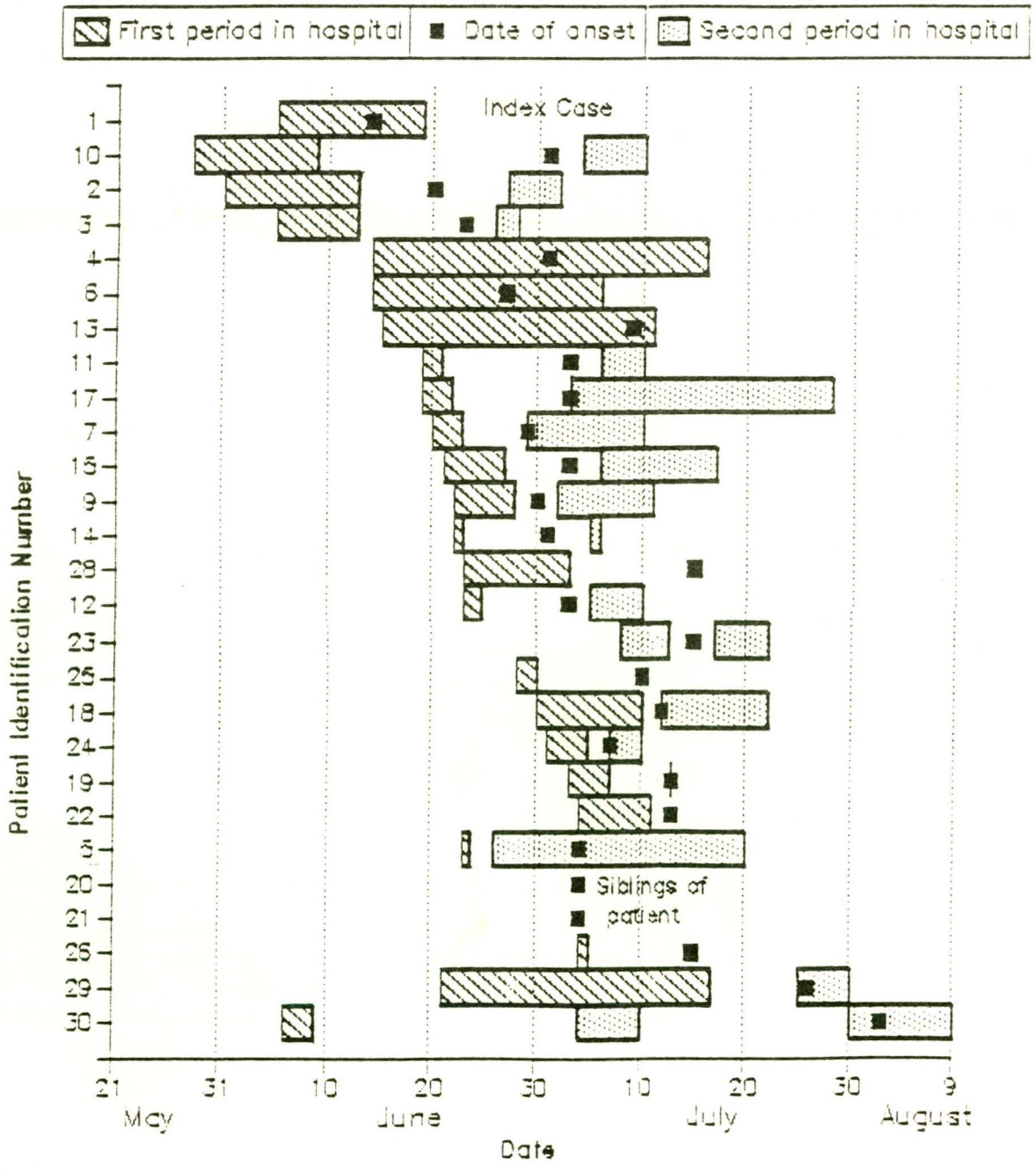
On 5 June 1989, a 15-month-old child from the Solomon Islands was admitted to the paediatric general medical ward of a Brisbane hospital. She had come to Brisbane for investigation of a suspected 'cardiac problem', but the cardiologist who saw her was not prepared to initiate definitive investigations because of suspected pneumonia.

On 14 June, it was noticed that the child had a faint, maculopapular rash on her body. She was continuing to have 'snuffles' and a cough and had also developed fever and was increasingly irritable. She was transferred from the general medical ward to an isolation ward and her rash was investigated by attempting viral isolations from nasopharyngeal aspirates,

determining her anti-streptolysin O titre (for Streptococcal infection) and antibody titres to arboviruses, rubella, measles, Epstein-Barr virus and Leptospira. All the tests were negative and the child was discharged from the isolation ward on 19 June, to return to the Solomon Islands. Her immunisation history had not been determined.

In the last few days of June, several children who had been in the general medical ward at the time that the index case was a patient there were readmitted. Some of the children had shared the same cubicle as the index case and all of them had fever and a rash. By July 12, a total of 20 children had become infected (3 who had not left the ward, 13 who had been discharged and were readmitted, 2 who had been discharged who were not readmitted and 2 sibling visitors of a patient). Positive results of Direct Fluorescent Antibody (DFA) tests on nasopharyngeal aspirates on this date confirmed that the children had measles.

Figure 1: Dates of Onset of Symptoms, Admissions and Discharges of Affected Children

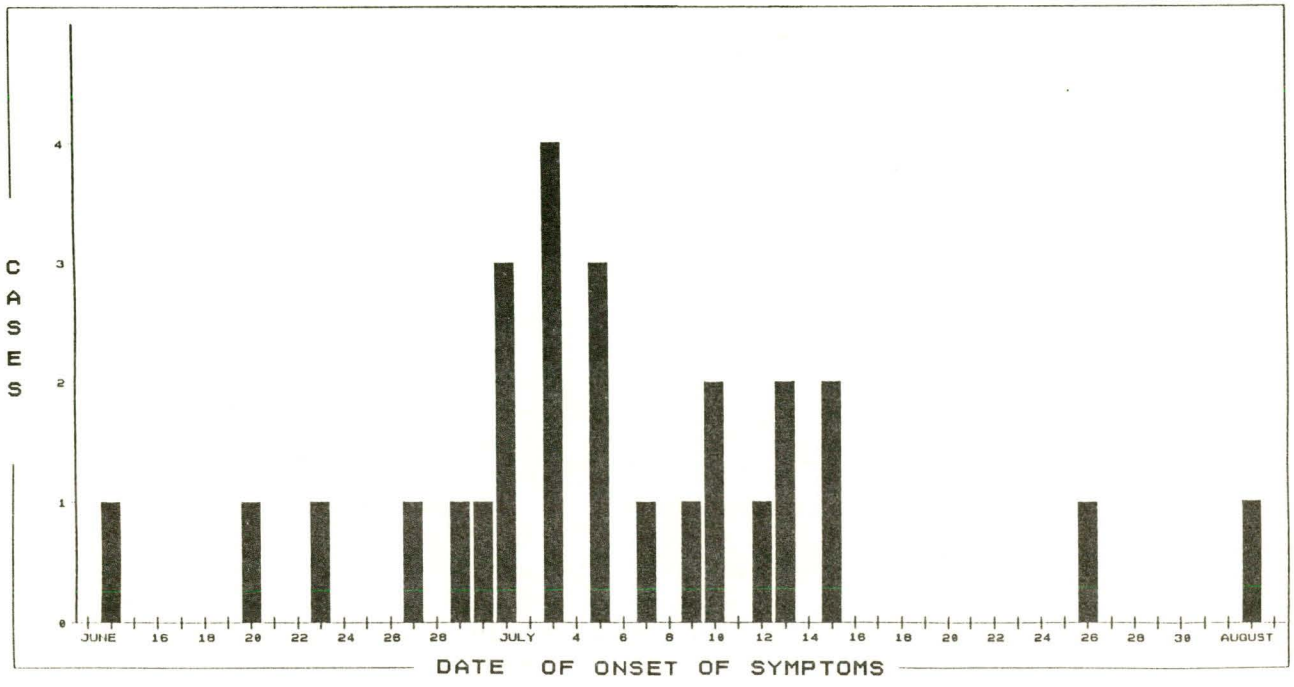


A further 6 children had onset of symptoms between 13 July and 2 August, bringing the total number of cases to 27 (including the index case). The attack rates were determined as the percentage of children who were infected over the total number of admissions. In the general medical ward, the attack rate was 4% in June, 57% in July and 14% overall. No nosocomial measles cases occurred in the isolation ward.

Details of the date of onset on symptoms and the dates of admissions and discharges of all the children affected in this outbreak are shown in Figure 1. The index case is shown as patient 1. The figure also shows the 5 patients who developed measles after discharge but within the incubation period of the disease. The two children who developed measles as a result of visiting their sibling in the ward are also shown; they were not admitted but were treated as out-patients (patients 20 and 21). No other cases occurred in persons who were not patients.

Figure 2 shows the epidemic curve. The incubation period for measles averages 10 days (range 8 to 14 days) and patients are infective from about 3 days prior to the onset of symptoms to about 4 days after the appearance of the rash. From these data it can be determined that there were at least 3 generations of infection occurring in this outbreak. The index case could only have infected children who had onset of symptoms up until 1 July (at the latest). Cases with onset of symptoms between 2 July and 19 July must have been at least secondary cases, infected by the first group of primary cases, but some could have been tertiary cases infected by patients with onset of symptoms in early July. The patient with onset of symptoms on 26 July must have been a tertiary case at least, probably infected by patients with onset of symptoms in mid-July. Patient 30, whose onset of symptoms was on 2 August, was in the ward from 6 to 9 June and from 4 to 10 July. If this

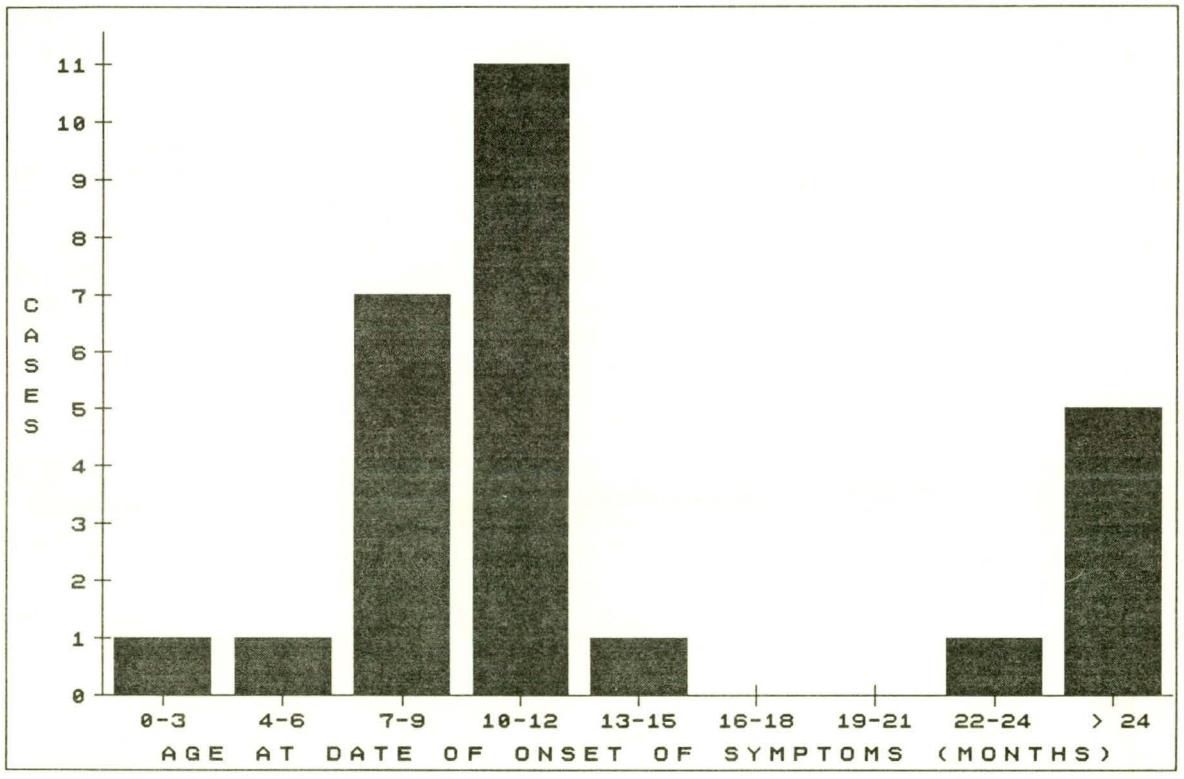
Figure 2: Epidemic Curve



8-month-old patient was part of this outbreak, he or she must have experienced an extremely long incubation period (at least 23 days). (This type of extension of incubation has been known to occur in young children who can retain maternal antibodies for the first 12 months of their lives.)

Figure 3 shows the age of the patients at the date of onset of symptoms. Most of the patients (20 of 26) were 12 months old or less, and so would not have been vaccinated against measles. Seven patients were older than 12 months and should, in the absence of contraindications, have already had measles vaccine.

Figure 3: Age of the Patients at Onset of Symptoms



Two children who were confirmed to have measles died from respiratory complications of the disease. Both had pre-existing severe congenital neurological problems.

Containment Strategy

From July 12, the following measures were used to contain the measles outbreak:

1. The general medical ward was closed.
2. All general medical ward readmissions were made to this ward. This included children who had been in the ward between 15 June and representation.
3. All children with a putative diagnosis of measles were transferred to this ward.
4. The measles IgG status of all the children who were inpatients in the ward at the time and who did not have symptoms of measles was determined.

5. Gamma globulin was administered to all non-immune and immunocompromised patients who had been in either the general medical or isolation wards since 5 June.
6. Respiratory isolation procedures were implemented to minimise further spread of the infection.
7. Measles vaccination was offered to all unimmunised contact children.

Laboratory Investigations

A total of 18 of the cases were laboratory-confirmed. Table 1 details the results of the laboratory investigations, some of which were performed retrospectively. Twenty children had blood samples tested for measles IgM and fifteen of those were found to be positive. Five of the samples were negative but this may be explained by the fact that some of the blood samples had been collected at times other than during the acute phase of the illness.

Fifteen children had nasopharyngeal specimens tested for measles antigen using a DFA test. Eight of these were positive, including 5 which were from patients who also had positive IgM tests. The low number of positive DFAs may have been because the first 6 tests were performed using old reagents which were then replaced with new reagents. It is possible that 4 of the DFA results were false negatives as the patients involved had measles IgM.

Attempts were made to isolate measles virus from 18 patients, but none of the cultures was positive.

Table 1: Laboratory Investigations

Test	Number Tested	Number Positive
Measles DFA Test	15	8
Measles IgM	20	15
Viral Culture	18	0

Discussion

The high infectivity of measles virus in confined settings such as hospital wards was confirmed by this outbreak. Incidents such as this could reoccur if an 'atypical rash' in a child is missed or misdiagnosed. Once a rash appears, the patient has already been infective for several days, so transfer to an isolation ward is not sufficient to avoid spread of the disease, and the containment procedures outlined above (respiratory isolation, administration of gamma globulin or vaccine) must also be used.

The NH&MRC advises that the spread of measles can be contained by the vaccination within 72 hours of susceptible children who have been in contact with the infected case. If there is doubt about a child's measles immunity, the vaccine should be given, since there are no ill-effects from vaccinating those already

sero-positive. Normal immunoglobulin (human) is available for individuals for whom the live vaccine is contraindicated. Children under the age of 1 year, immunocompromised persons and non-immune pregnant women should receive normal human immunoglobulin preferably within 6 days of exposure using a dosage of 0.2mL/kg (0.5mL/kg for immunocompromised persons to a maximum of 15mL). The attenuated vaccine virus is not excreted after vaccination and thus there is no risk of infection from vaccine recipients (1).

The following procedures will also help to prevent nosocomial measles outbreaks. On admission, all children should have a vaccination (and travel) history taken, and the history must be easily accessible in the case notes. Children with rashes should be investigated for measles; nasopharyngeal specimens can be tested for measles antigens (DFA tests) and culture, and IgM tests can be performed urgently if measles is suspected. Immunisation should be offered to any unvaccinated child over the age of 12 months who is to be admitted to hospital.

Measles is a highly infectious disease which is potentially fatal for the young, immunocompromised or malnourished child or adult. It is caused by a virus of the family paramyxovidiae (genus morbillivirus). It is confined to humans and is maintained in the community by non-immune persons. It is spread by the respiratory and/or conjunctival route in the copious secretions produced prior to and immediately after the development of the rash. It is often a severe disease, frequently complicated by otitis media (2.5%) or bronchopneumonia (4%). Encephalitis occurs in about 1 in every 2000 reported cases and survivors of this complication often have permanent brain damage (1). Measles virus can also cause Subacute Sclerosing Panencephalitis (SSPE) which develops as a late sequelae in a few cases (1 to 5 per 100,1000) several years after the initial infection (2).

In 1988, there were 248 cases of measles reported in Australia and the preliminary figure for 1989 is 166 cases. These are probably very much underestimations of the actual numbers of cases, as measles was only notifiable in New South Wales, Queensland, South Australia, Western Australia and the Australian Capital Territory, and many cases would not have been notified even in those areas. There were 6 deaths from measles in Australia in 1988, the latest year for which death statistics are available (3).

The significant morbidity and mortality of measles infection make efforts to eliminate this preventable disease an important area of Public Health which should be fully supported in all areas of health care. The measles vaccine is safe and effective and confers a strong life-time immunity to the disease. If parents are encouraged to have their children vaccinated, and coverage is increased sufficiently, measles will be able to be eradicated completely, both in Australia and eventually worldwide.

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AIDS AND HIV SURVEILLANCE, AUSTRALIA: 23 MARCH 1990

The National Centre in HIV Epidemiology and Clinical Research reports that as at 23 March, 1990, a total of 1824 cases of AIDS with 1056 deaths had been reported in Australia. Table 1 details the new cases and deaths reported for the period 24 February to 23 March (Weeks 9 to 12) and the cumulative totals by sex and State or Territory in which the initial diagnosis was made.

Table 1: New cases of AIDS and deaths from AIDS for weeks 9 to 12 1990, and cumulative to 23 March 1990, by sex and State or Territory in which initial diagnosis was made

State/ Territory	Weeks 9 to 12, 1990 New Cases		Deaths		Cumulative, 1982 to 23 March 1990 Cases		Deaths	
	M	F	M	F	M	F	M	F
NSW	28	0	18	0	1100	33	679	23
VIC	7	0	1	0	373	9	185	4
QLD	0	0	0	0	125	5	73	4
WA	1	0	1	0	79	6	38	2
SA	0	0	0	0	59	2	30	1
NT	0	0	0	0	2	0	1	0
TAS	0	0	0	0	8	1	3	1
ACT	1	0	0	0	22	0	12	0
Total	37	0	20	0	1768	56	1021	35

Table 2 details the notifications of persons newly diagnosed as HIV antibody positive during weeks 9 to 12 1990, and cumulative notifications, since the introduction of HIV antibody testing, by sex and State/Territory of notification.

Table 2: Notifications of persons newly diagnosed as HIV antibody positive, and cumulative to 23 March 1990, by sex and State/Territory of notification

State/ Territory	Weeks 9 to 12, 1990				Cumulative, 1985 to 23 March 1990			
	M	F	NK*	TOTAL	M	F	NK*	TOTAL
NSW	-	-	-	N/A**	5250	293	2766	8309**
VIC	23	2	0	25	2004	12	276	2292
QLD	11	1	0	12	844	28	0	872
WA	3	1	0	4	483	26	0	509
SA	-	-	-	N/A**	312	23	34	369****
NT	0	0	0	0	6	0	43	49
TAS	0	0	0	0	46	2	0	48
ACT	1	0	0	1	7	0	97	104
TOTAL	38	4	0	42	8952	384	3216	12,552

* Sex not known
** Notifications not available
*** Cumulative to 30 June 1989. (See report in CDI 90/8)
**** Cumulative to 23 February 1990

MEASLES, MUMPS AND RUBELLA IN FRANCE

(Based on 'La Rougeole, La Rubeole, Les Oreillons en France C. Roure, Bulletin Epidemiologique Hebdomadaire 1989 50:210-11)

1. EPIDEMIOLOGICAL SITUATION

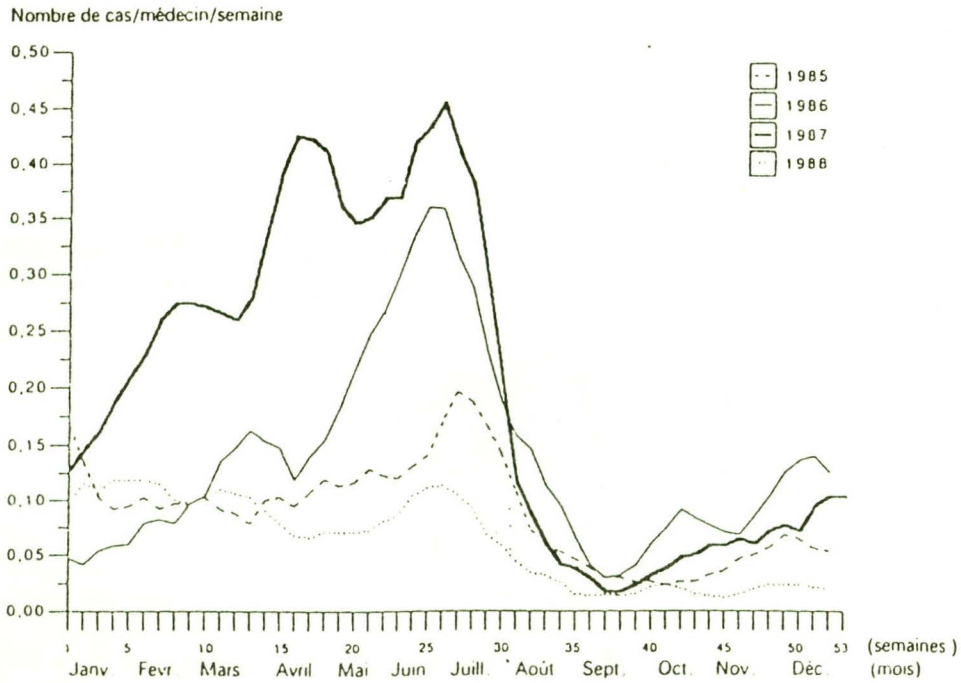
Measles, rubella and mumps are universally spread in characteristic epidemiological cycles, but since the advent of vaccines for these diseases, their epidemiology has been altered. Classically, measles was endemic in large urban cities in France, with a peak epidemic every two years. In rural areas, the epidemic cycle could be longer. The current epidemiological situation in France is the result of the incidence of these three diseases and their complications, and the rate of vaccination coverage.

Morbidity

Measles and mumps are not notifiable in France, but since 1986 they have been monitored by a medical practitioners' network (Sentinel General Practice). General Practitioners report the number of cases encountered in their practices weekly. In addition, the computerised network of surveillance and information on communicable diseases established in 1984 allows the epidemiology of measles and mumps to be monitored nationally. Data collected during the past four years has been used to calculate the incidence of measles and mumps and to monitor the seasonal activities of these diseases.

Measles incidence has been found to increase at the beginning of spring and throughout the month of June (Figure 1). This seasonal increase appears much later than classicly observed in the UK and the US.

Figure 1: Weekly Measles Incidence, 1985 to 1988*



*Nombre de cas/medecin/semaine = Number of cases/general practitioner/week
Semaines = Weeks Mois = Months

The recent average incidence per 100,000 population and the estimated number of cases are summarised in Table 1.

Table 1: Incidence and Estimated Number of Cases of Measles in France, 1985-1989

YEAR	INCIDENCE (per 100,000)	ESTIMATED NUMBER OF CASES
1985	375	208,000
1986	602	334,000
1987	981	545,000
1988	294	164,000
1989	239	133,000

For comparative purposes it is worth noting that the rate was 1.4 per 100,000 population in the US in 1988.

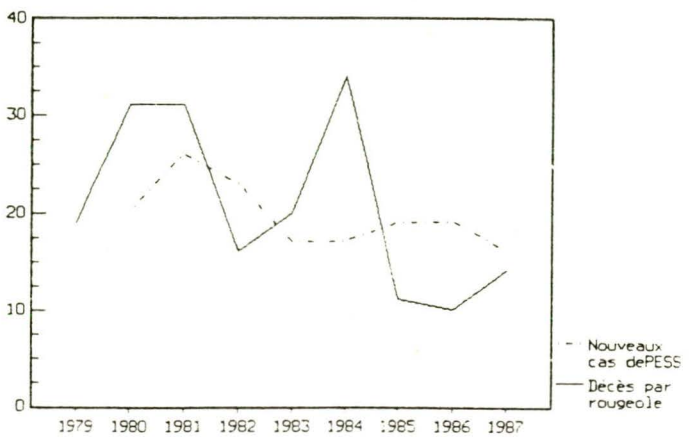
The fluctuation in incidence observed above is more dependent on the cyclical activity of measles rather than the impact, yet undetermined, of the vaccination coverage.

The network of 'sentinel practices' provides interesting data on the age breakdown. The median age is approximately 6 years with 42-49% of children under 5 years. This is viewed as justification for the implementation of a 'catch-up' vaccination program for unprotected children in the 2- to 6-year-old age group.

Apart from the sentinel network, there are other indicators for measles surveillance. Severe cases of measles and measles cases requiring hospitalisation are subject to specific investigations which allow the incidence of encephalitis to be precisely determined. In 1987, an epidemic year, 39 encephalitis cases were identified.

Subacute Sclerosing Panencephalitis (SSPE) cases, which appear around seven years following initial measles infection, are monitored by a network of virology laboratories which forward data to the National Health Laboratory. Fifteen to twenty five new cases of SSPE are identified each year (Figure 2).

Figure 2: Measles Deaths and New Cases of SSPE, 1979 to 1987*

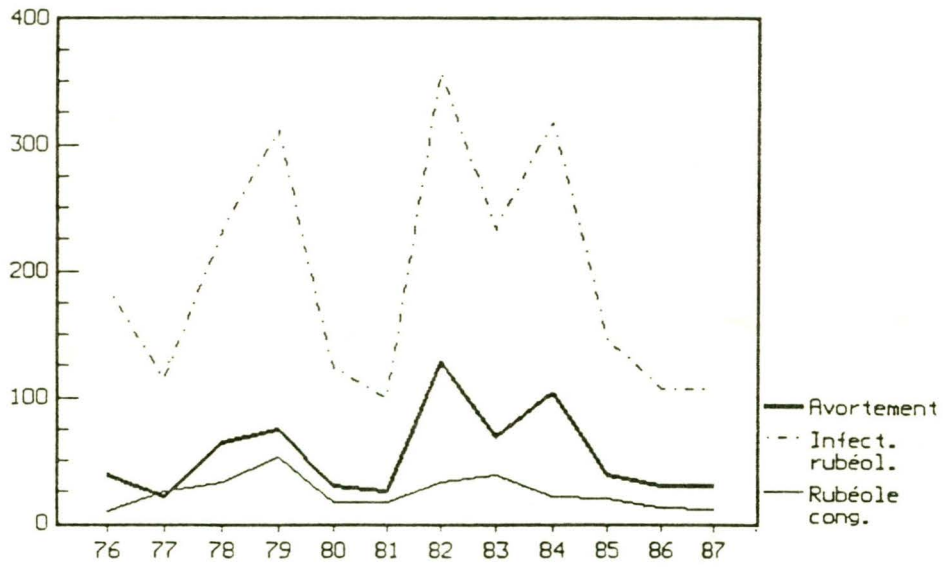


* Nouveaux cas dePESS = new cases of SSPE
Deces par rougeole = measles deaths

The incidence of mumps is monitored by a surveillance system established by the sentinel practices network; the rate is estimated at 300 per 100,000 population with approximately 150,000 cases recorded in France in 1988. Mumps infections have been found to occur at a later age than measles, at about the age of 9 years. Sentinel practitioners reported mumps complications and sequelae in 3% of cases.

Tne incidence of rubella is not well known. It is most probably underestimated because rubella is not notifiable and, because the diagnosis is based on symptoms, it can be unreliable. In contrast, the incidence of congenital rubella is estimated by the virology laboratories network. Around 100 rubella infections in pregnant women, resulting in 10 to 40 cases of congenital rubella, are reported to the National Health Laboratory each year (Figure 3).

Figure 3: Annual number of Rubella Infections and their Consequences in Pregnant women, 1976 to 1987*



* Avortment = Abortions
Infect. rubeol = rubella infections in pregnant women
Rubeole cong. = congenital rubella syndrome cases.

Mortality

Measles still causes vaccine-preventable deaths of young children in France. In the years 1979 to 1987, there were 10 to 30 deaths per year.

There are 5 to 10 deaths due to mumps annually.

Mortality due to rubella is very low, fewer than 5 deaths per year. However, the number of therapeutic abortions following the diagnosis of rubella infections in pregnant women is a problem. (Figure 3). The remarkable feature of these statistics is that 67% of these abortions were for multiparous women who could have been vaccinated following their first delivery if known to be non-immune.

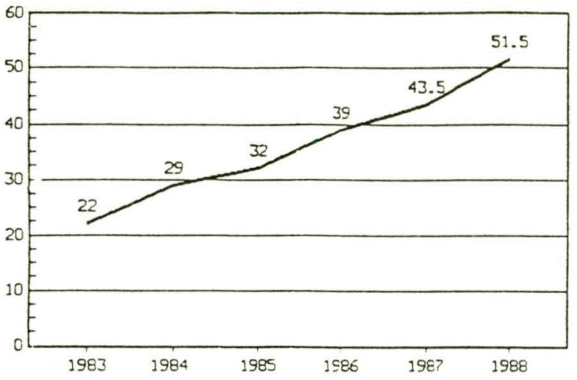
Vaccination Coverage

The epidemiological situation is partly explained by the insufficient vaccination rate, for measles/mumps/rubella in France.

In 1987, a national investigation carried out by the National Health Laboratory and Statistical Information Service, evaluated the impact of a mealses/rubella vaccination campaign conducted in 6-year old school children. The vaccination rates were only 41% for measles and 9.5% for rubella, and the discrepancy between rates obtained in different areas was considerable.

In 1988, the rate of vaccination coverage against measles was estimated using health records of 24-month-old children. The average was 51.5% ranging from 18% in Lot to 82% in Paris. The increase in vaccination coverage against measles between the years 1983 and 1988 in children under two years of age is shown in Figure 4.

Figure 4: Measles Vaccination Coverage, 1983 to 1988, Per cent



2. ECONOMIC CONSEQUENCES

In October 1988, the Department of Health conducted a cost-benefit analysis of measles/mumps/rubella vaccination.

At that time, the vaccination coverage in France was 50% and the cost of the diseases was estimated at 250m francs for measles, 148m francs for mumps and 157m francs for rubella. This cost not only represented medical and pharmaceutical costs but also costs of absenteeism (for parents in the majority of cases). It did not include loss of production (for parents), and the economic cost due to deaths of young children who were not yet productive.

The cost of the diseases was compared to the cost of vaccination. In the case of a strategy combining universal coverage of children under 2 and a 'catch-up' program for unvaccinated 2- to 6-year-olds, the cost for the first year was considerable, estimated at 711m francs. However, the invested amount is rapidly recovered and a net positive benefit is achieved by the 8th year. If total considerations of social security are taken into account, the economic benefit is apparent in the fourth year.

3. CONCLUSION

Despite the fact that vaccination against measles/mumps/rubella is not compulsory by law, it is morally and socially compulsory. The reality is that there is only a mediocre vaccination coverage and slow progress towards a better coverage has created a heterogeneous epidemiological situation: some individuals have post-vaccination immunity, some have natural immunity and others have no immunity. If such a situation is allowed to persist, adults over 40 years of age will be exposed to measles and mumps at an age where complications could be servere. Therefore comprehensive vaccination programs should be implemented quickly to enable the achievement of economic and epidemiological benefits.

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CDI Editorial Comment

In both Australia and France, the trivalent attenuated measles/mumps/rubella vaccine is used. The NH&MRC recommends that it should be routinely given to children between the ages of 12 and 15 months, but that it can also be used to protect any other unprotected children (see also the article on the nosocomial measles outbreak in this issue of *CDI*).

The National Campaign Against Measles was instituted to fight a similar mediocre measles vaccination coverage in Australia. A report of the achievements of the Campaign in South Australia will be published in the next issue of *CDI*, and reports and data from other areas of Australia will be published as they become available.

NOTICE TO READERS: CONTRIBUTIONS WELCOME

We invite readers of the *Communicable Diseases Intelligence* to contribute articles for publication. Contributions covering any facet of communicable diseases, but especially those with public health significance, are welcomed. The *CDI* can be used by you to

- make rapid reports of incidents with topical epidemiological significance
- report preliminary or incomplete results of studies
- expand on information in general press releases
- report results and incidents peculiar to a particular area of Australia.

Remember that

- the *CDI* is not an official publication, so the contribution of material does not usually preclude its later publication elsewhere
- the *CDI* appears fortnightly and that items of topical interest can usually be published within one or two issues of receipt
- the *CDI* can give you and your work publicity and promote information exchange.

We are also interested in receiving copies of any publications which you are producing in these areas - bulletins, newsletters, annual reports, local health statistics. Your suggestions and comments on the *CDI* are also welcome.

The address for all contributions and correspondence is:

The Editor
Communicable Diseases Intelligence
Communicable Diseases Section
Department of Community Services and Health
GPO Box 9848
CANBERRA ACT 2601

Telephone: 06 2897674
Facsimile: 06 2897802

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

PERIOD 26/04/90 TO 09/05/90

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)

		018	019	065	066	110	111	112	113	114	115	TOTAL
0100	ADENOVIRUS NOT TYPED	0	0	3	1	4	0	2	4	0	4	18
0101	ADENOVIRUS TYPE 1	0	0	0	0	1	1	0	0	0	0	2
0102	ADENOVIRUS TYPE 2	0	1	0	0	3	7	0	0	0	0	11
0103	ADENOVIRUS TYPE 3	0	1	0	0	2	1	0	0	0	0	4
0104	ADENOVIRUS TYPE 4	0	1	0	0	4	0	0	0	0	0	5
0105	ADENOVIRUS TYPE 5	0	0	0	0	0	1	0	0	0	0	1
0106	ADENOVIRUS TYPE 6	0	0	0	0	1	0	0	0	0	0	1
0107	ADENOVIRUS TYPE 7	0	0	0	0	0	1	0	0	0	0	1
0110	ADENOVIRUS TYPE 10	0	0	0	0	0	0	1	0	0	0	1
0116	ADENOVIRUS TYPE 16	0	0	0	0	1	0	0	0	0	0	1
0120	ADENOVIRUS TYPE 20	0	0	0	0	0	0	1	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	5	0	0	1	0	6
0201	INFLUENZA A VIRUS	0	0	0	0	0	0	0	2	0	0	2
0203	INFLUENZA B VIRUS	0	0	0	0	0	0	0	1	1	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	0	4	0	3	27	3	2	0	5	26	70
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	0	0	0	5	0	0	0	0	5
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	2	0	0	0	0	3	5
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	0	0	1	0	0	0	0	6	7
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	3	1	1	1	7	30	5	36	93	177
0500	RHINOVIRUS (ALL TYPES)	0	4	0	0	4	7	2	0	0	0	17
0600	MYCOPLASMA PNEUMONIAE	0	1	1	0	5	1	2	0	0	0	10
0700	ORNITHOSIS-PSITTACOSIS	0	0	0	0	1	0	1	0	0	0	2
0809	COXSACKIEVIRUS A9	0	1	0	0	0	0	0	0	0	0	1
0902	COXSACKIEVIRUS B2	0	0	0	0	0	1	0	0	0	0	1
0903	COXSACKIEVIRUS B3	0	0	0	0	0	1	0	0	0	0	1
1000	ECHOVIRUS NOT TYPED	0	0	0	0	3	0	0	0	0	0	3
1006	ECHOVIRUS TYPE 6	0	0	0	0	0	2	0	0	0	0	2
1011	ECHOVIRUS TYPE 11	0	0	0	0	2	2	0	0	0	0	4
1013	ECHOVIRUS TYPE 13	0	1	0	0	0	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	0	0	0	0	1	0	0	0	3	0	4
1030	ECHOVIRUS TYPE 30	0	0	0	0	0	3	0	0	0	0	3
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	2	0	3	0	0	5
1103	POLIOVIRUS TYPE 3	0	0	0	0	2	0	0	0	0	0	2
1200	MUMPS VIRUS	0	1	0	0	0	0	0	1	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	0	2	1	0	0	0	0	1	0	0	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	0	1	4	0	0	20	1	0	9	35
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	6	4	0	33	0	1	1	2	0	47
1303	VARICELLA-ZOSTER VIRUS	0	3	8	0	0	1	4	3	1	2	22
1306	HERPES SIMPLEX TYPE 1	0	40	35	1	30	0	1	1	0	52	160
1307	HERPES SIMPLEX TYPE 2	0	43	54	0	21	0	22	12	0	40	192
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	3	0	0	0	0	3
1401	COXIELLA BURNETII	0	5	0	0	1	0	3	0	0	0	9
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	4	4	0	0	0	17	0	18	43
1514	MOLLUSCUM CONTAGIOSUM	0	0	1	0	0	0	0	0	0	0	1
1521	MEASLES VIRUS	0	1	0	0	0	1	2	0	0	0	4
1522	RUBELLA VIRUS	0	1	0	0	5	0	1	0	0	0	7
1532	HEPATITIS B ANTIGEN	0	16	17	0	36	1	30	3	0	38	141
1535	HEPATITIS A ANTIBODY	0	2	8	0	8	0	0	1	0	0	19
1541	CHLAMYDIA A - C. TRACHOMATIS	4	0	21	1	12	0	20	4	0	16	78
1555	PAPOVAVIRUS GROUP (PAPILLOMA -	0	1	0	0	0	0	0	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	0	30	0	1	5	4	2	4	1	18	65
1564	ROTAVIRUS	0	0	1	1	1	0	0	1	0	0	4
1566	NORWALK AGENT	0	0	0	0	0	0	1	0	0	0	1
1570	ENTEROVIRUS TYPE 70	0	0	0	0	0	0	0	1	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	5	1	11	3	0	20
9992	ROSS RIVER VIRUS	0	2	3	0	0	0	2	0	0	0	7
9995	DENGUE	0	0	1	0	0	0	0	0	0	0	1
TOTAL		4	170	164	17	217	65	151	77	53	325	1243

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES BY STATE OF CONTRIBUTING LABORATORY

PERIOD 26/04/90 TO 09/05/90

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	SA	TOTAL
0100	ADENOVIRUS NOT TYPED	6	0	4	4	4	18
0101	ADENOVIRUS TYPE 1	0	1	0	0	1	2
0102	ADENOVIRUS TYPE 2	0	8	0	0	3	11
0103	ADENOVIRUS TYPE 3	0	2	0	0	2	4
0104	ADENOVIRUS TYPE 4	0	1	0	0	4	5
0105	ADENOVIRUS TYPE 5	0	1	0	0	0	1
0106	ADENOVIRUS TYPE 6	0	0	0	0	1	1
0107	ADENOVIRUS TYPE 7	0	1	0	0	0	1
0110	ADENOVIRUS TYPE 10	1	0	0	0	0	1
0116	ADENOVIRUS TYPE 16	0	0	0	0	1	1
0120	ADENOVIRUS TYPE 20	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	5	0	0	0	6
0201	INFLUENZA A VIRUS	2	0	0	0	0	2
0203	INFLUENZA B VIRUS	2	0	0	0	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	7	7	26	3	27	70
0302	PARAINFLUENZA VIRUS TYPE 2	0	5	0	0	0	5
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	3	0	2	5
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	6	0	1	7
0400	RESPIRATORY SYNCYTIAL VIRUS (R	71	10	93	2	1	177
0500	RHINOVIRUS (ALL TYPES)	2	11	0	0	4	17
0600	MYCOPLASMA PNEUMONIAE	2	2	0	1	5	10
0700	ORNITHOSIS-PSITTACOSIS	1	0	0	0	1	2
0809	COXSACKIEVIRUS A9	0	1	0	0	0	1
0902	COXSACKIEVIRUS B2	0	1	0	0	0	1
0903	COXSACKIEVIRUS B3	0	1	0	0	0	1
1000	ECHOVIRUS NOT TYPED	0	0	0	0	3	3
1006	ECHOVIRUS TYPE 6	0	2	0	0	0	2
1011	ECHOVIRUS TYPE 11	0	2	0	0	2	4
1013	ECHOVIRUS TYPE 13	0	1	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	3	0	0	0	1	4
1030	ECHOVIRUS TYPE 30	0	3	0	0	0	3
1100	POLIOVIRUS NOT TYPED	3	2	0	0	0	5
1103	POLIOVIRUS TYPE 3	0	0	0	0	2	2
1200	MUMPS VIRUS	1	1	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	1	2	0	1	0	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	21	0	9	5	0	35
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	4	6	0	4	33	47
1303	VARICELLA-ZOSTER VIRUS	8	4	2	8	0	22
1306	HERPES SIMPLEX TYPE 1	2	40	52	36	30	160
1307	HERPES SIMPLEX TYPE 2	34	43	40	54	21	192
1399	HERPES VIRUS TYPING PENDING	0	3	0	0	0	3
1401	COXIELLA BURNETII	3	5	0	0	1	9
1502	PICORNIA VIRUS - NOT TYPED = E	17	0	18	8	0	43
1514	MOLLUSCUM CONTAGIOSUM	0	0	0	1	0	1
1521	MEASLES VIRUS	2	2	0	0	0	4
1522	RUBELLA VIRUS	1	1	0	0	5	7
1532	HEPATITIS B ANTIGEN	33	17	38	17	36	141
1535	HEPATITIS A ANTIBODY	1	2	0	8	8	19
1541	CHLAMYDIA A - C. TRACHOMATIS	24	4	16	22	12	78
1555	PAPOVAVIRUS GROUP (PAPILLOMA -	0	1	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	7	34	18	1	5	65
1564	ROTAVIRUS	1	0	0	2	1	4
1566	NORWALK AGENT	1	0	0	0	0	1
1570	ENTEROVIRUS TYPE 70	1	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	15	5	0	0	0	20
9992	ROSS RIVER VIRUS	2	2	0	3	0	7
9995	DENGUE	0	0	0	1	0	1
TOTAL		281	239	325	181	217	1243

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 26/04/90 TO 09/05/90

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	6	7	8	9	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	0	4	1	0	0	6	0	0	0	1	12
0101	ADENOVIRUS TYPE 1	0	2	0	0	0	0	0	0	0	0	2
0102	ADENOVIRUS TYPE 2	0	8	0	0	0	2	0	0	0	0	10
0103	ADENOVIRUS TYPE 3	2	1	0	0	0	0	0	0	0	0	3
0104	ADENOVIRUS TYPE 4	1	0	0	0	0	0	0	0	0	0	1
0105	ADENOVIRUS TYPE 5	0	1	0	0	0	0	0	0	0	0	1
0106	ADENOVIRUS TYPE 6	0	0	0	0	0	1	0	0	0	0	1
0107	ADENOVIRUS TYPE 7	0	1	0	0	0	0	0	0	0	0	1
0110	ADENOVIRUS TYPE 10	1	0	0	0	0	0	0	0	0	0	1
0116	ADENOVIRUS TYPE 16	0	0	0	0	0	0	0	0	0	1	1
0199	ADENOVIRUS TYPING PENDING	0	4	0	1	0	1	0	0	0	0	6
0201	INFLUENZA A VIRUS	0	1	0	0	0	0	0	0	0	0	1
0203	INFLUENZA B VIRUS	0	2	0	0	0	0	0	0	0	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	2	64	1	0	0	0	0	0	1	0	68
0302	PARAINFLUENZA VIRUS TYPE 2	0	5	0	0	0	0	0	0	0	0	5
0303	PARAINFLUENZA VIRUS TYPE 3	0	5	0	0	0	0	0	0	0	0	5
0399	PARAINFLUENZA VIRUS TYPING PEN	0	7	0	0	0	0	0	0	0	0	7
0400	RESPIRATORY SYNCYTIAL VIRUS (R	5	170	0	0	0	0	0	0	0	1	176
0500	RHINOVIRUS (ALL TYPES)	0	14	0	0	0	0	0	1	1	0	16
0600	MYCOPLASMA PNEUMONIAE	1	6	0	1	0	0	0	0	0	0	8
0700	ORNITHOSIS-PSITTACOSIS	0	1	0	0	0	0	0	0	0	0	1
0809	COXSACKIEVIRUS A9	0	1	0	0	0	0	0	0	0	0	1
0903	COXSACKIEVIRUS B3	0	0	0	1	0	0	0	0	0	0	1
1000	ECHOVIRUS NOT TYPED	0	3	0	0	0	0	0	0	0	0	3
1006	ECHOVIRUS TYPE 6	0	1	0	1	0	0	0	0	0	0	2
1011	ECHOVIRUS TYPE 11	0	1	0	0	0	0	0	0	0	1	2
1013	ECHOVIRUS TYPE 13	0	0	0	0	0	0	0	0	0	1	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	0	4	0	0	0	0	0	0	0	0	4
1030	ECHOVIRUS TYPE 30	0	2	0	0	0	0	0	0	0	0	2
1100	POLIOVIRUS NOT TYPED	0	0	1	0	0	3	0	0	0	0	4
1103	POLIOVIRUS TYPE 3	0	1	0	0	0	0	0	0	0	0	1
1200	MUMPS VIRUS	0	0	1	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	1	0	0	0	0	0	0	2	3
1301	HERPES SIMPLEX VIRUS - NOT TYP	3	2	1	1	0	0	0	0	0	11	18
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	6	1	0	0	0	0	0	0	1	0	8
1303	VARICELLA-ZOSTER VIRUS	4	1	1	0	0	0	0	0	0	16	22
1306	HERPES SIMPLEX TYPE 1	4	7	0	0	0	0	0	0	0	109	120
1307	HERPES SIMPLEX TYPE 2	3	0	0	0	0	0	0	0	1	90	94
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	0	3	3
1401	COXIELLA BURNETII	2	0	1	0	0	0	0	0	0	0	3
1502	PICORNIA VIRUS - NOT TYPED = E	1	10	1	1	1	27	0	0	0	2	43
1514	MOLLUSCUM CONTAGIOSUM	0	0	0	0	0	0	0	0	0	1	1
1521	MEASLES VIRUS	0	1	0	0	1	0	0	0	0	1	3
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	0	0	5	5
1532	HEPATITIS B ANTIGEN	48	1	0	0	0	0	57	0	0	0	106
1535	HEPATITIS A ANTIBODY	3	0	0	0	0	1	13	0	0	0	17
1541	CHLAMYDIA A - C. TRACHOMATIS	25	0	0	0	0	0	0	0	0	1	26
1555	PAPOVAVIRUS GROUP (PAPILLOMA -	0	0	0	0	0	1	0	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	2	15	0	0	0	2	4	0	4	2	29
1564	ROTAVIRUS	0	0	0	0	0	4	0	0	0	0	4
1566	NORWALK AGENT	0	0	0	0	0	1	0	0	0	0	1
1570	ENTEROVIRUS TYPE 70	0	0	0	1	0	0	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	3	0	2	0	12	0	0	0	0	17
9992	ROSS RIVER VIRUS	1	0	0	0	0	0	0	0	0	0	1
TOTAL		114	350	9	9	2	61	74	1	8	248	876

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2

PERIOD 26/04/90 TO 09/05/90

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	1	0	0	0	0	0	4	0	1	0	6
0102	ADENOVIRUS TYPE 2	0	0	0	0	0	0	0	0	0	1	1
0103	ADENOVIRUS TYPE 3	0	0	1	0	0	0	0	0	0	0	1
0104	ADENOVIRUS TYPE 4	4	0	0	0	0	0	0	0	0	0	4
0120	ADENOVIRUS TYPE 20	0	0	0	0	0	0	0	0	1	0	1
0201	INFLUENZA A VIRUS	0	0	0	0	0	0	0	1	0	0	1
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	0	0	0	0	0	2	0	0	2
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	1	0	0	1
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	0	0	1	1
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	1	1	0	2
0700	ORNITHOSIS-PSITTACOSIS	0	0	0	0	0	0	1	0	0	0	1
0902	COXSACKIEVIRUS B2	0	0	0	0	0	0	0	0	1	0	1
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	0	0	2	0	0	2
1030	ECHOVIRUS TYPE 30	0	0	0	0	0	0	0	1	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	0	0	0	0	1	1
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	0	0	1	0	0	1
1200	MUMPS VIRUS	0	0	1	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	1	0	0	0	0	0	0	0	1
1301	HERPES SIMPLEX VIRUS - NOT TYP	1	16	0	0	0	0	0	0	0	0	17
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	35	1	0	0	1	0	2	0	39
1306	HERPES SIMPLEX TYPE 1	2	32	2	0	0	0	0	0	4	0	40
1307	HERPES SIMPLEX TYPE 2	0	97	0	0	0	0	0	0	1	0	98
1401	COXIELLA BURNETII	0	0	0	0	0	0	2	4	0	0	6
1521	MEASLES VIRUS	0	0	1	0	0	0	0	0	0	0	1
1522	RUBELLA VIRUS	0	0	2	0	0	0	0	0	0	0	2
1532	HEPATITIS B ANTIGEN	0	2	0	0	0	0	0	1	32	0	35
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	1	1	0	2
1541	CHLAMYDIA A - C. TRACHOMATIS	0	50	0	0	2	0	0	0	0	0	52
1556	CMV - CYTOMEGALOVIRUS	1	3	0	0	0	1	1	5	25	0	36
1599	ENTEROVIRUS TYPING PENDING	1	0	0	0	0	0	0	1	1	0	3
9992	ROSS RIVER VIRUS	0	0	0	0	3	0	0	1	2	0	6
9995	DENGUE	0	0	0	0	0	0	0	1	0	0	1
TOTAL		10	200	43	1	5	1	9	23	72	3	367