COMMUNICABLE DISEASES INTELLIGENCE

ISSN 0725-3141 VOLUME 15 NUMBER 13 24 June 1991

CONTENTS

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CDI is produced fortnightly by:

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DEPARTMENT OF HEALTH, HOUSING AND COMMUNITY SERVICES

COMMUNICABLE DISEASES NETWORK-AUSTRALIA
A National Network for Communicable Diseases Surveillance

MEASLES IN NEW SOUTH WALES

(Reproduced with acknowledgment from Monthly Infectious Diseases Report, Royal Alexander Hospital for Children, March 1991 (17), editor D Isaacs)

Recent outbreaks of measles in New South Wales have highlighted the need to obtain and maintain high levels of immunisation against vaccine-preventable diseases. From June until December, 1990 there was a major measles outbreak in the Hunter region around Newcastle with 253 recorded cases.

Most of these cases were not notified until the local Public Health Unit actively traced contacts of measles cases. One hundred and fifty-eight (158) cases occurred in the Port Stephens area, north of Newcastle. About 60% of the cases were children who had never been immunised against measles, 18% had documented immunisation and 22% were said to have been immunised but without documentation. We are grateful to Dr Thais Miles of the Hunter Public Health Unit for these figures.

More recently there has been an outbreak in the Sydney area, mainly among school-age children in central Sydney, although there have been cases in north Sydney. There have been 46 confirmed cases, the majority being located by active case detection. The index case in February, 1991 was a 12 year old boy in Glebe High School, where 7 other cases have occurred. Several other central Sydney schools have had confirmed cases. Eight pre-school age children have been notified.

In the Newcastle outbreak at least 20% and as many as 40% of children with measles were immunised against measles. Does this mean that measles vaccine does not work? On the contrary, there is good evidence that the vaccine is at least 95% effective in protecting against measles virus infection[1]. Paradoxically, the greater the level of immunisation, the higher the proportion of measles cases that will occur in immunised children. This is illustrated in Table 1, which is modified from reference 2.

It can be seen from this Table that, assuming 95% efficacy of the vaccine, about 40% of children with measles would be expected to have a history of having been immunised (as in the Newcastle outbreak) if 90% of the population had been immunised. On the other hand, if 20% of children who develop measles have been immunised, then about 85% of the population have been immunised. Thus, in the Newcastle outbreak when 20-40% of measles cases were in immunised children, assuming 95% vaccine efficacy, then about 85-90% of the population were immunised.

The concept of herd immunity is that, if a sufficient proportion of a population is immunised with an effective vaccine, there are insufficient susceptibles for the disease to spread. It is clear from the Newcastle outbreak that even 85% vaccine coverage is insufficient to prevent epidemics. In the United States measles immunisation is widely required for school entry and this has achieved 98% or greater measles immunisation by school-age, resulting in only a few cases of measles every year until 1988[3]. A few outbreaks of measles have occurred in American schools despite such high immunisation levels, but most cases can be attributed to primary immunisation before 12 months, or the expected 2-5% rate of vaccine failure, rather than to waning immunity[1]. However, in 1989 there were 18,000 cases of measles and 42 deaths reported in the USA. Most cases occurred in unimmunised adults and children. It is vital that all children be immunised against measles to have any hope of preventing large outbreaks of measles, which is a highly contagious and life-threatening disease, particularly for young children.

Measles (or MMR) immunisation is normally recommended at 12 months or older. If children are immunised earlier than this any maternal antibody

Table 1. Proportion of susceptibles who have been immunised at different levels of vaccine coverage

	PROPORTION OF POPULATION VACCINATED				
	95%	90%	85%	80%	50%
Population size	1000	1000	1000	1000	1000
Number vaccinated	950	900	850	800	500
Number protected*	902	855	807	760	475
Vaccinated but susceptible*	48	45	43	40	25
Unvaccinated	50	100	150	200	500
Total susceptible	98	145	193	240	525
% susceptible vaccinated	53%	38%	22%	17%	5%

* assumes a 95% efficacy

present can interfere with the success of immunisation. Thus, in the USA in the 1970s, 15-21% of children immunised at age 9-12 months, but only 6% of children aged 13-18 months, failed to seroconvert[4]. A recent study shows that 97% of Australian children immunised at 12 months will seroconvert to measles[5].

During an outbreak the recommendations for measles immunisation have to be modified. The NSW Department of Health recommends that all children of 12 months or over be immunised. The only contraindication is immune deficiency or immunosuppression; children with egg allergy can be immunised safely in hospital if they are observed for 15-30 minutes afterwards[6].

A history of having had measles is unreliable and such children should be immunised. Since the incubation period of the vaccine strain of measles virus is shorter (about 7-10 days) than the wild-type virus (10-14 days) a non-immunised child of 12 months or over can usually be protected by immunising them within 72 hours of contact with a child having measles. If contact occurred more than 3 days earlier, then normal human serum immunoglobulin 0.2 ml/kg IM may modify the severity of disease. In an epidemic a similar approach, ie vaccine within 72 hours of contact, immunoglobulin after 3 days, is recommended for 9-11 month old children in contact with measles. In addition 9-11 month olds can be immunised with MMR, even without a history of contact, and this immunisation may protect them. Children immunised at 9-11 months should be reimmunised with MMR at 12-15 months to ensure protection. Children aged 6-8 months in contact with measles can be protected by giving IM immunoglobulin. Children less than 6 months old are naturally protected by maternal antibody.

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LEGIONNAIRES' DISEASE , VICTORIA, 1990

(Sally Ng and Colin Derbyshire, Infectious Diseases Unit, Health Department Victoria)

Thirteen cases of Legionnaires' disease were notified in Victoria in 1990. All cases, as in previous years, were sporadically distributed over the year.

There was a male : female ratio of 12:1 and ages ranged from 19 to 80 with a mean age of 52.6 years.

The case fatality rate was 38.4% (5/13 deaths) with pontine haemorrhage the cause of death in 2 patients.

Diagnosis of the 13 cases was based on the following:

1. A fourfold or greater rise in antibody titre in paired sera - 4 cases
2. Isolation of organism from clinical specimens - 8 cases
3. Combination of both culture and serological response - 1 case

The species implicated were again, mainly *L.pneumophila* (9 cases), *L. micdadei* (2 cases) and *L. longbeachae* (2 cases)

Of the *L.pneumophila* cases the implicated serogroups were:

Serogroup 1	6 cases
Serogroup 2, 4, 6	1 case each

RISK FACTORS

All but 1 patient had some underlying medical conditions or other known risk factors such as smoking and alcohol abuse. The medical conditions included the following:

1. Hairy cell leukaemia
2. Renal polyarteritis
3. Membranous glomerulonephritis
4. Myeloproliferative illness
5. Psoriasis on short-term low dosage oral steroids
6. Ischaemic heart disease
7. Spina bifida/mental retardation

EPIDEMIOLOGICAL INVESTIGATIONS

No *Legionella* spp were isolated from any of the environmental samples examined during the course of investigations. These samples included water from domestic water supplies (one of which had a thermostatic mixing valve), garden sprinkler systems, (over hanging, below and above ground), decorative fountains, fish tanks and potting mixes. Of special interest was the investigation into the use of reclaimed water (effluent) at a country golf course. The club has a licence from the Health Department Victoria for conditional use of the waste water. Irrigation is permitted only at night and early morning, 3 hours after and 3 hours before any occupancy of the course.

The patient lived on the golf course and investigations were carried out to determine if the waste water could have been the source of the infection. Raw sewage, after primary sedimentation and secondary treatment with trickling filtration, was maturated in the final treatment lagoon. This treated effluent had approximately 60 days final detention in the winter months, less in summer. The distribution lines from the final treatment lagoon to the golf course were underground, varying in length from 600m to 1500m. Effluent was discharged through emitters which had 1/4 inch bores. As such, the water was discharged in jets rather than fine aerosols. The temperature of the final effluent recorded over the months under investigation ranged from 18-22°c.

Seven samples of effluent taken from the final lagoon and from various discharge points were all negative for *Legionella* spp. It was considered that the sewage treatment with the generally low temperatures would render reclaimed water an unlikely habitat for *Legionella* spp and hence an unlikely source of the patient's illness. (One of the conclusions from a WHO meeting held in Geneva on 27-29 November 1981 was "there is no conclusive evidence to implicate waste water")[1].

Another patient acquired his infection whilst touring America and Canada. His itinerary included a visit to Niagara Falls during the incubation period. Enquiries did not indicate any other associated case.

All 13 cases were community acquired; in none of them was the source identified.

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EARLY SYPHILIS - CASES FROM NEW SOUTH WALES DETECTED AT ICPMR, WESTMEAD HOSPITAL 1980-1990

(J L Backhouse, S I Nesteroff, G Papoutsakis; Clinical Microbiology Department, ICPMR, Westmead Hospital)

In New South Wales, data on the incidence of syphilis is available from a monthly report of notifications received by the Epidemiology and Health Services Branch of the Department of Health and published in the NSW Public Health Bulletin.

This information does not give a true representation of the current epidemiology of the disease, reporting only the total number of cases with reactive serology. For example, reported cases often show serological evidence of old infection, either of late latency or of suspected happenstance treatment.

Reports from the United States of America for the period 1981-1989 have shown that the number of cases of early syphilis rose by 34%, with the greatest increase occurring in the four years 1985-1989[1]. By 1990 the incidence of primary and secondary syphilis was the highest since 1949, the most recent cases being reported from heterosexual minority populations[2].

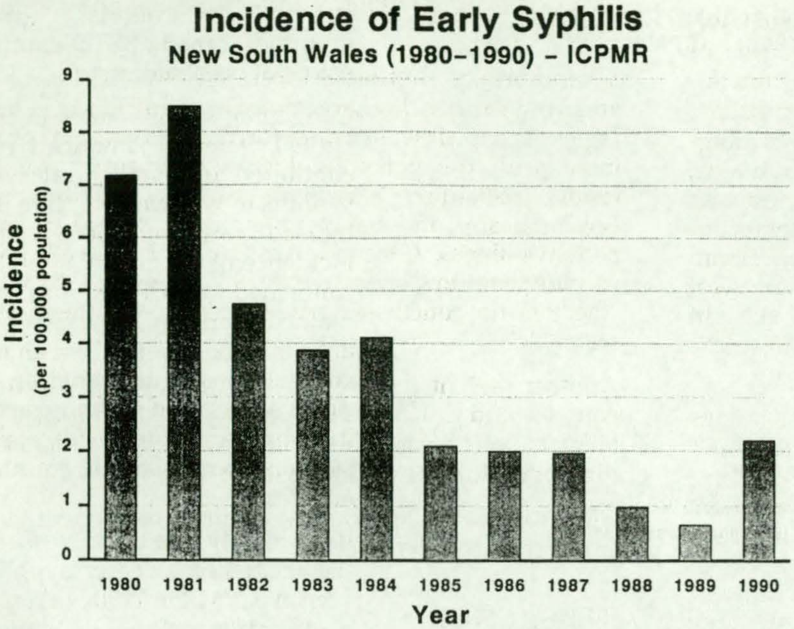
This study documents the number of cases of early syphilis detected at the Syphilis Reference Laboratory for New South Wales and Australia, Institute of Clinical Pathology and Medical Research (ICPMR), Westmead Hospital, in the period 1980 to 1990. The detected cases of early syphilis were from two groups: specimens submitted for routine screening tests (Westmead Centre, Parramatta STD Clinic and Sydney STD clinics to 1989) and referred sera submitted for diagnostic serology (country hospitals, private practitioners/pathologists and Sydney STD clinics from 1989). Early syphilis, as defined here, includes all primary, secondary and early latent stages of the disease, confirmed by a reactive VDRL test titre of equal to or greater than 8 and reactive specific tests.

A comparison of the incidence of early cases of syphilis per 100,000 population per annum (see Figure 1) and of the number of early cases as a percentage of all new cases detected at ICPMR per annum (unpublished data) shows a similar fall from 1981 to 1989 and a rapid rise in 1990 (+232% and +320% respectively). This rising trend has continued, the number of early cases for the same period, January to April, in 1989, 1990 and 1991 at ICPMR was 9, 25 and 39 respectively.

The number of cases of early syphilis in males fell from 349 in 1980 to 23 in 1989 (-93.4%) and in females from 94 cases to 15 cases (-84%)(see Figure 2). In 1990 the number of cases rose by 57 in males (+248%) and by 35 in females (+233%). The male to female (m:f) ratio in 1980 of 5.6:1, fell to 1.3:1 by 1987, and in 1990 had risen to 1.6:1.

In males from the metropolitan area a sharp decrease occurred in the period 1981 to 1985, from 300 to 51 cases (- 83%)(see Figure 3). There was little change between

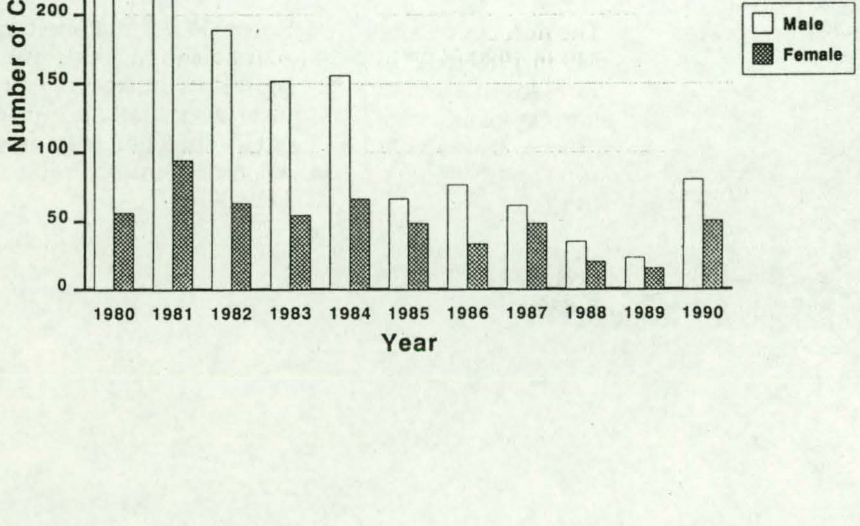
Figure 1



1985 and 1987, then between 1987 and 1989 the numbers fell from 51 to 18 cases (-64%). The overall decrease from 1981 to 1989 was 94%. In 1990 the number of cases for city males rose from 18 to 58 cases (+222%). The changes in females were less marked, showing an overall decrease from 48 to 10 cases (-79%) between 1981 and 1989; the number of cases increased by 80% (10 to 18 cases) in 1990. The city m:f ratio of 9.5:1 in 1980, fell to 1.8:1 by 1989, rising to 3.2:1 in 1990.

The number of cases in both country males and females fell from a peak in 1981, the decrease in males from 49 cases in 1981 to 5 cases in 1988-89 (-90%), and in females a fall from 46 to 4 cases (-91%) for the same period (see Figure 4). A rapid increase followed in 1990 in males of 340% (5 to 22 cases) and in females of 540% (5 to 32 cases). The country m:f ratio was 1.1:1 in 1980, and showed minor variations in subsequent years, suggesting a relatively stable heterosexual population; in 1990 the m:f ratio was 0.7:1.

Figure 2



In the period 1980-90, two new STD clinics opened in the Sydney metropolitan area, a private clinic in 1981 and the Albion Street Centre in 1985, however the ratio of the annual number of cases of early syphilis from city private practitioners to those from STD clinics showed little variation and was, on average, 1:1.7. This figure fell in 1987 to 1:0.9, and in 1989 rose above the mean to 1:2.7 (see Figure 5).

A comparison of the number of early cases referred from city and country hospitals gave a ratio of 1:2.3; a significant rise was seen in 1982, 1989, and 1990, when the ratio rose to above 1:4. In the period 1989-90, an increase in the incidence of early syphilis was seen in all areas and in both sexes within these areas, with the exception of females from STD clinics. In females from country areas, there was a 600% increase from hospitals and 400% from private practitioners. In males from country areas, the percentage increase in incidence of early syphilis was half that shown for females. The increase for the city male was 500% from hospitals and 300% from STD clinics.

DISCUSSION

The rapid decrease in the number of cases of early syphilis in males in the metropolitan area (1981-85) is evidence of the success of education and safe sex practices, particularly in homosexual males, following the onset of the human immunodeficiency virus (HIV) epidemic. However, the increase seen in 1990 for the city male suggests that these previously successful educational programmes may have to be re-assessed, as studies have shown that genital lesions found in STDs such as syphilis facilitate the transmission of HIV[3,4].

An increase in the incidence of gonorrhoea has also been recorded, from a low in 1985, the number of cases in 1989-90 rising in both relative and absolute terms (personal communication, Dr J W Tapsall, AGSP co-ordinator, The Prince of Wales Hospital, Sydney).

The 1990 increase in incidence of early syphilis seen in both sexes in country areas has been predominantly in Aboriginal communities in the western and northern areas of the

Figure 3

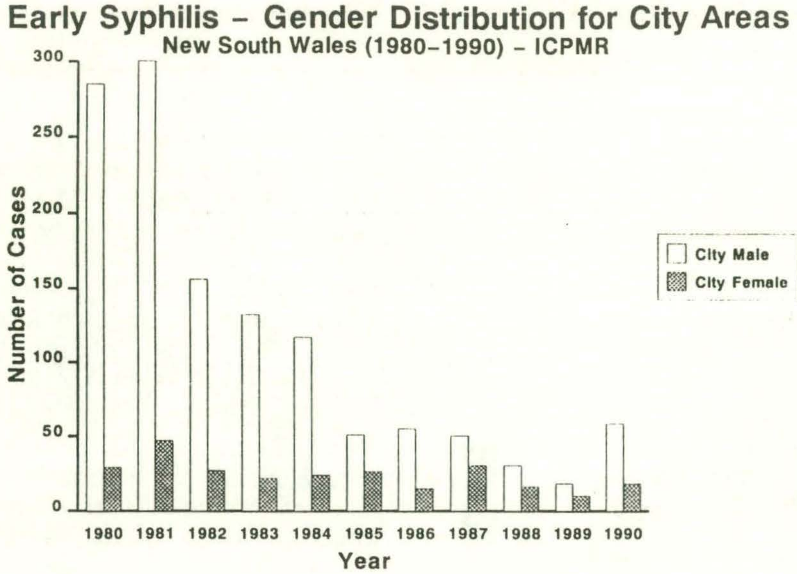


Figure 4

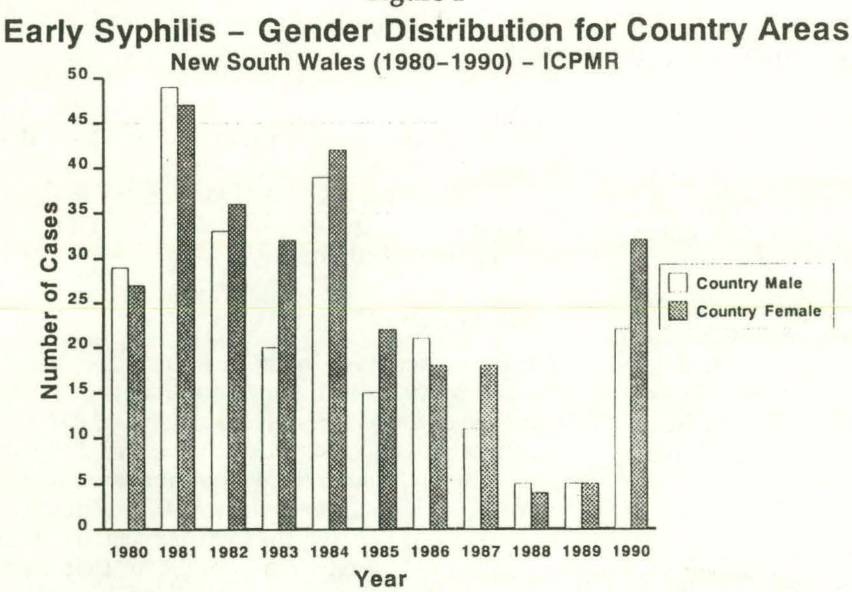
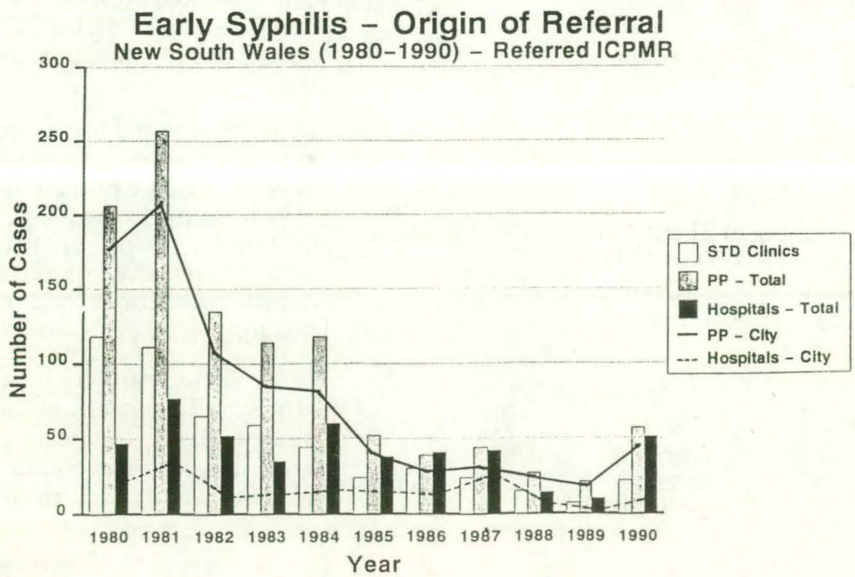


Figure 5



State. This rise also suggests current educational programmes aimed at STD control have not been successful.

Congenital syphilis rates in the United States of America have continued to parallel rates of syphilis in women and have increased since 1984[2]. The incidence of congenital syphilis confirmed at ICPMR, has remained static at 2-3 cases per annum. The potential for an increase in this figure has risen in direct association with the rapid increase in incidence of early syphilis, particularly in country areas.

It is unlikely that the increase in the incidence of early syphilis seen at ICPMR in 1990 is a result of selective referral. Similar trends occurred in both the Sydney metropolitan area and in New South Wales country areas from both public and private sources.

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PRIMARY AND SECONDARY SYPHILIS - UNITED STATES, 1981-1990

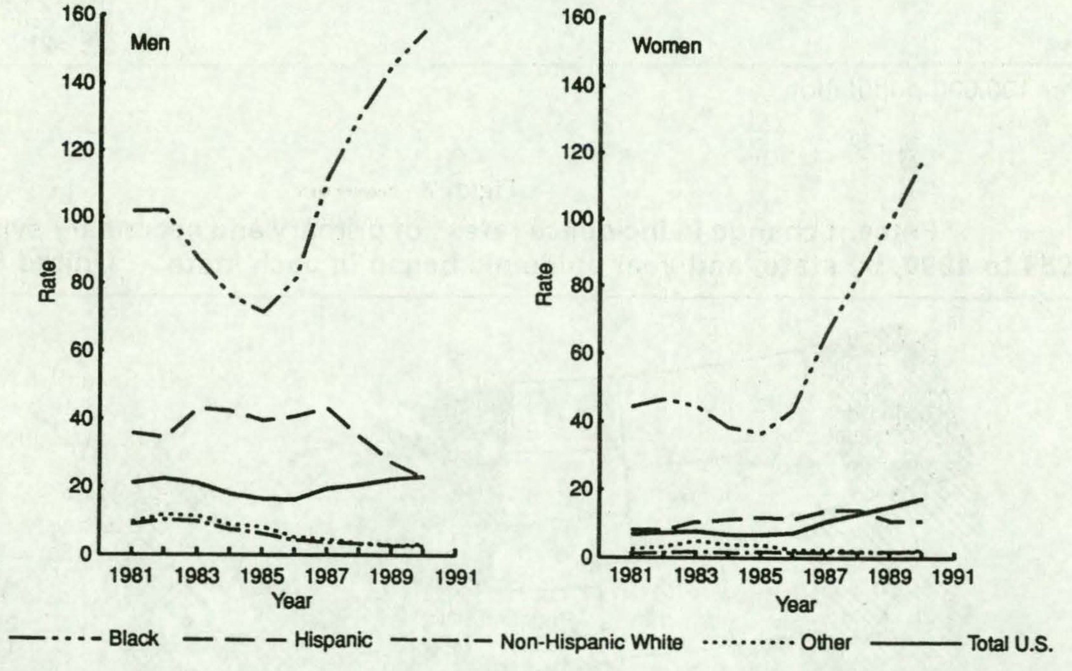
(Based on MMWR 1990; 40[19]314-23)

Since 1985, the number of primary and secondary (P&S) syphilis cases reported in the United States has been increasing. In 1990, 50 223 cases were reported, a 9% increase from 1989. The incidence of 20 cases per 100 000 persons, a 75% increase from 1985, is the highest since 1949. This report summarises the incidence of P&S syphilis during 1990 and provides comparison data from 1981-1990.

From 1985 through to 1990, P&S syphilis rates for black men increased from 69 to 156 per 100 000 (126%), and for black women, from 35 to 116 per 100 000 (231%)(Figure 1). For non-Hispanic white men, the rate declined from 6 to 3 per 100 000.

Figure 1

Trends in race- and gender-specific incidence rates* of primary and secondary syphilis – United States, 1981–1990



*Per 100,000 population.

Rates for American Indian/Alaskan Native men were higher than rates for white men, peaking at 21 per 100 000 in 1983 and decreasing to 9 per 100 000 in 1990. Although rates for American Indian/Alaskan Native women decreased, they were based on fewer than 100 cases per year.

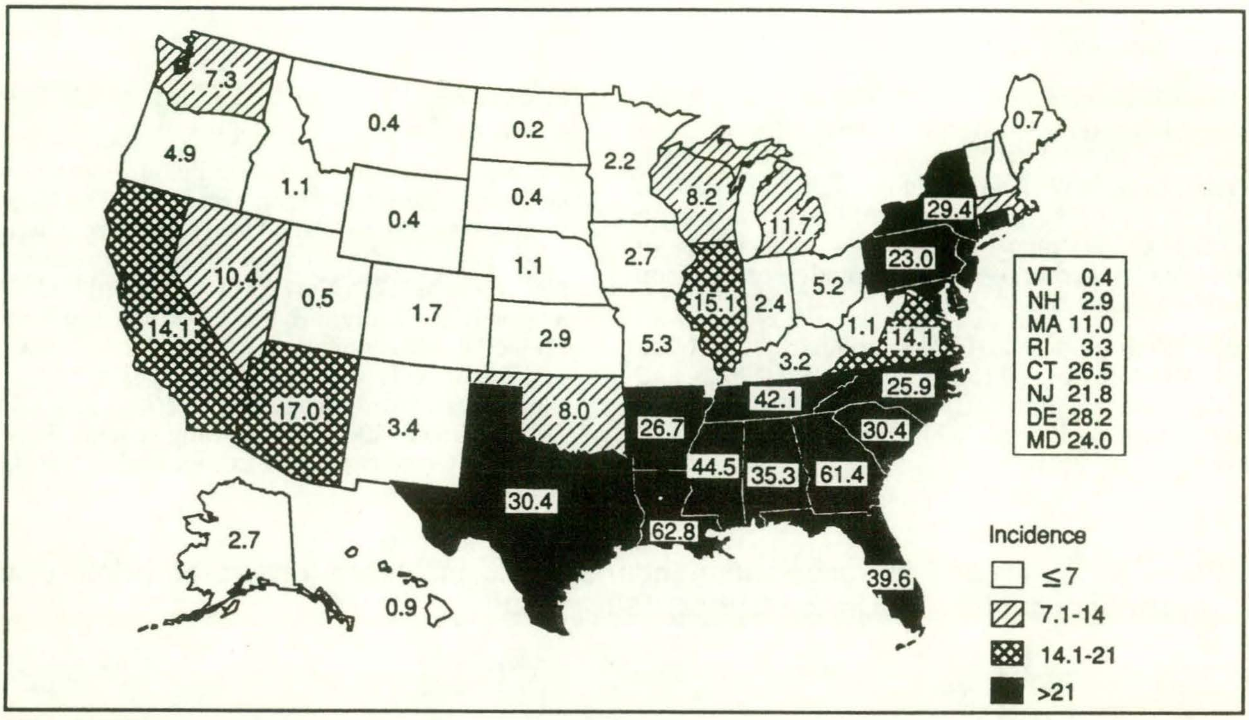
In 1990, P&S syphilis rates were >7 per 100 000 persons in 26 states (Figure 2). From 1985 through to 1990, rates increased in 25 of these 26 states; since 1989, rates have increased more than 40% in seven southern states: Alabama (55%), Arkansas (65%), Louisiana (67%), Mississippi (59%), North Carolina (45%), Tennessee (46%), and Virginia (47%)(Figure 3).

For most of the United States, the highest rates of P&S syphilis occurred in urban areas. In 1990, large cities with rates >100 per 100 000 persons were Atlanta (222 cases per 100 000 persons), Washington, D.C. (183), New Orleans (174), Newark (160), Memphis (158), Philadelphia (147), and Charlotte, North Carolina (102) (Table 1). Although rates continued to increase in several cities involved early (before 1988) in the epidemic, the largest increases from 1989 to 1990 occurred in areas not previously affected, including several cities in the midwest-Cincinnati (107%), Cleveland (235%), Columbus (293%), and Toledo (278%), Ohio; Milwaukee (153%), Wisconsin and St. Louis (172%), Missouri.

In some cities where the incidence increased early in the epidemic, rates have begun to decline. For example, in New York City the rate in 1990 declined 15% after a peak of 68 per 100 000 in 1988. Similar declines occurred in Portland (65%), Miami (51%), and San Diego (10%) following peak rates in 1988. From 1987 through to 1990, P&S syphilis rates in Los Angeles decreased 56%, from 52 to 23 per 100 000.

Figure 2

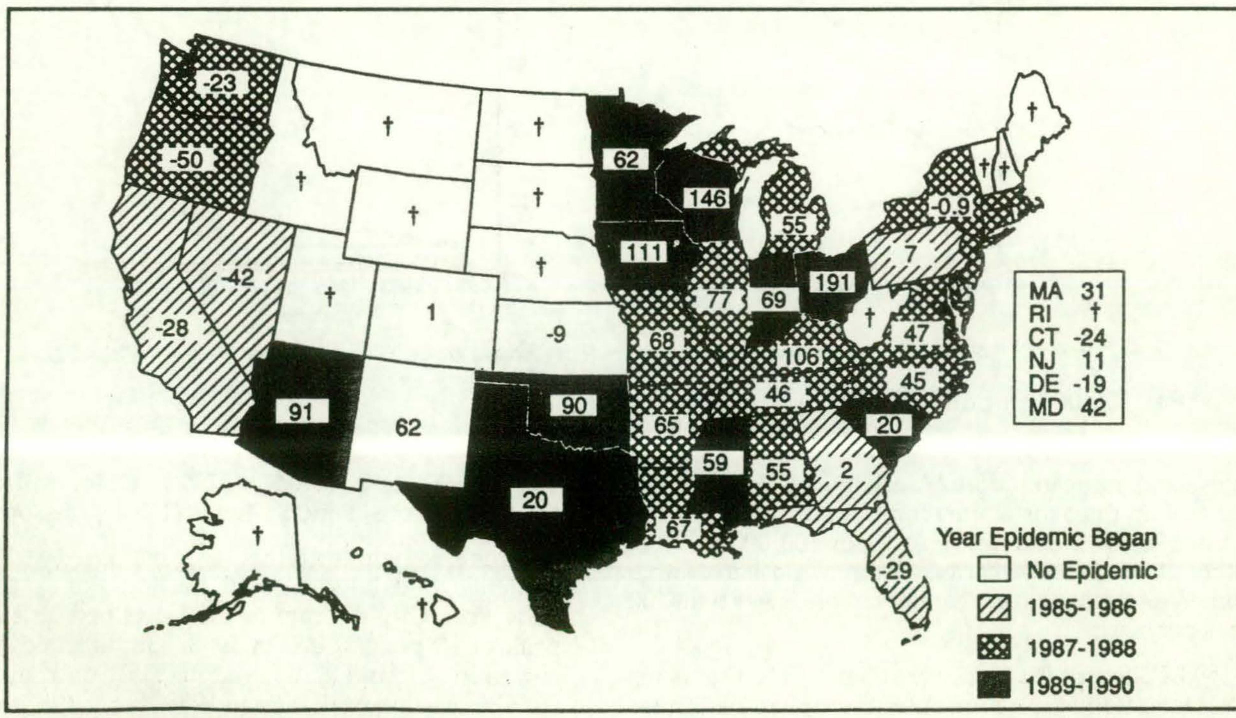
Incidence rates* of primary and secondary syphilis, by state – United States, 1990



*Per 100,000 population.

Figure 3

Percent change in incidence rates* of primary and secondary syphilis from 1989 to 1990, by state, and year epidemic began in each state – United States



*Per 100,000 population.

†States reporting fewer than 50 cases per year during 1985–1990 were excluded.

Through 1988, the epidemic affected population centers primarily on the east, west, and gulf coasts. From 1989 to 1990, rates declined in several of these areas, while in the midwest and south-central region rates increased (Figure 3).

Table 1. Incidence rates* of primary and secondary syphilis in 1989 and 1990 and percent change from 1989 to 1990 - 25 US cities+

CITY	INCIDENCE RATES		
	1989	1990	% change
Atlanta, Ga	205	222	+8
Birmingham, Ala	48	60	+25
Boston, Mass	28	50	+78
Charlotte, NC	69	102	+48
Chicago, Ill	29	51	+76
Dallas, Tex	70	63	-10
Detroit, Mich	48	76	+58
Houston, Tex	44	64	+45
Jacksonville, Fla	102	70	-31
Jersey City, NJ	59	59	0
Memphis, Tenn	134	158	+18
Miami, Fla	67	52	-22
Wilwaukee, Wis	15	38	+153
Nashville, Tenn	23	66	+187
Newark, NJ	146	160	+10
New Orleans, La	164	174	+6
New York City, NY	59	58	-2
Oakland, Calif	49	37	-24
Philadelphia, Pa	125	147	+18
Richmond, Va	75	76	+1
Rochester, NY	80	63	-20
San Francisco, Calif	32	52	+63
St Petersburg, Fla	55	42	-24
Tampa, Fla	76	43	-43
Washington, DC	146	183	+26

* Per 100,000 population

\+ Of 63 cities with a population of more than 200,000 and for which data were available, these cities had the highest incidence rates of syphilis in 1990. For some cities, incidence rates are those of the county or counties in which the city is located.

MMWR Editorial Note: Since the current P&S syphilis epidemic began in 1986, the most notable trends have been:

1) the substantial increase in cases involving black heterosexuals,
2) changes in geographic distribution, and
3) the association of the epidemic with crack cocaine use.

For non-Hispanic white men, the decline in incidence has been attributed to decreased transmission among homosexual men[1]. In contrast, for blacks, the epidemic has been sustained through heterosexual transmission[2]. Differences in risk for syphilis between racial/ethnic groups and regions may be attributed in part to private/public access to care, reporting practices, and/or case ascertainment. For example, blacks may be more likely to obtain care from publicly funded sexually transmitted disease (STD) clinics, where reporting is often more complete than reporting from other sources; however, such differences in reporting are unlikely to fully account for the large increase among blacks.

Three factors have contributed to the increase in the current syphilis epidemic:

1. syphilis transmission has increased among medically hard-to-reach groups, such as crack cocaine users and other drug users. Cocaine use and the environment in which cocaine is used and exchanged appear to promote high-risk sexual behaviours, such as sex with multiple anonymous partners in exchange for drugs[3,4]. In these settings, sex partners are difficult to locate for diagnosis and treatment by STD-control programs[5].
2. persons in groups at increased risk for syphilis may not have access to health care, know when or how to seek appropriate health care, or consider health care a high priority.
3. declines in socioeconomic and education levels in certain populations (eg persons of lower income levels who live in an inner-city environment) have been associated with increased unemployment, drug use, prostitution, and family disruption - conditions conducive to the spread of syphilis[6].

Surveillance and epidemiologic data can assist STD-control programs in their syphilis-control efforts. For example, data collected from patient interviews conducted at jails and detention centers or sites frequented by syphilis patients can be used to identify persons at increased risk for syphilis[7]. However, the cost and effectiveness of these strategies in reducing the incidence and prevalence of syphilis must be rigorously evaluated.

Control measures may be more effective when they are supported by the affected communities and complemented by accessible clinical care. In addition, strengthened local, state, and national surveillance systems are essential to an improved understanding of the current syphilis epidemic and for evaluation of intervention strategies.

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OVERSEAS BRIEFS

1. CHOLERA

The World Health Organization has advised that cholera vaccination certificates are no longer officially required from travellers by any countries. However, some travellers are said to have experienced delays at entry points in the vicinity of some cholera infected areas because such certification had been requested.

The WHO reports the following details on cholera for the period 17 to 21 June:

- Brazil; 16 cases up to 5 June.
- Colombia; 2351 cases (597 confirmed), 1798 hospitalisations and 30 fatalities up to 18 June.
- Peru; 209546 cases, 81449 hospitalisations and 1802 deaths up to 1 June.
- Chad; 1848 cases, 227 deaths up to 15 June. Affected areas include Batha, Chari-Baguirmi, Kanem, Logone Occidental, Ouaddai, Mayo Kebbi and Guera prefectures.
- Iraq; 42 cases and 1 death to 5 June. Al-Qadisiya governate newly infected.

COMMUNICABLE DISEASES SURVEILLANCE

CDI LABORATORY REPORTING SCHEMES

There were 1342 reports processed for the latest period (5 June to 18 June 1991).

- **Influenza A (HINI)** has been isolated from a 49 year old male who had recently returned to Australia from China. This is the first influenza A isolate reported by Fairfield Hospital this season and the first influenza A (HINI) report received by the CDI since November 1989. The isolate has been referred to the Influenza Reference Laboratory at CSL for strain characterisation.

  Fairfield Hospital's first **influenza B** isolate of the season (isolated from a 20-year old female in April) has been characterised as B/Vic/2/87-like.

- Details of a recent case of **Australian encephalitis** in Queensland have been supplied by the State Health Laboratory, Brisbane. The patient, a 2 year old child from Weipa, showed elevated IgM antibody reacting with Murray Valley encephalitis antigen. IgM was detected in serum and CSF.

  After a period of frank encephalitis requiring intensive care, the patient has made a partial recovery but is still hospitalised and shows signs of neurological sequelae. Further clinical and epidemiological information is being sought.

  The diagnosis of the first clinical case of MVE in Queensland since 1982, along with the dramatic increase in the number of diagnosed Ross River virus infections in the first 3 months of 1991, and the continuing low level of dengue infection in North Queensland, should re-focus attention on the potential problems arbovirus infections pose for Australia.

- *Bacteroides melaninogenicus* was isolated from a blood culture of a 32 year old woman with fever following a Caesarean section.

- A single report of **Q fever** was received for the period; a 21 year old male from NSW. No occupational exposure details were provided.

- *Haemophilus influenzae* (type B) was isolated from a throat swab and blood cultures from a 6 year old male who presented with epiglottitis. The isolate was beta lactamase positive and sensitive to chloramphenicol and cefotaxime. This isolate was reported by Tamworth Laboratory of New England Pathology, which has recently joined the CDI Reporting Scheme.

- **Coxsackievirus** reports:

1. **Coxsackievirus B4** was isolated from a neonate with generalised infection. The virus was initially isolated from cerebrospinal fluid and urine, and subsequently from postmortem brain and heart tissue. The infant, one of twins, died at 11 days of age from viral myocarditis. The second twin did not show any evidence of infection on observation and all diagnostic samples were negative. (Royal Children's Hospital and Westmead Hospital).
2. **Coxsackievirus B5** was isolated from nasopharyngeal and faecal samples from a neonate (35 weeks gestation) who required ventilation.
3. **Coxsackievirus A9** was isolated from a nasopharyngeal sample of a 16 year old who was 32 weeks pregnant, with decreased conscious state and abnormal chest x-ray.

So far this year we have received reports of **coxsackievirus** types **B4** (25 reports), **B5** (17 reports), **A9** (16 reports), **B2** (14 reports), **B3** (6 reports), **B1** (3 reports) and A16 (1 report). Details of reports for coxsackievirus types B4, B5 and A9 are presented in the following three tables. Of the 25 type B4 reports, 13 were from samples collected in March and eleven of these were from NSW.

NOTE: Data such as is presented below can be obtained from the CDI on request.

Table 1. Coxsackievirus type B4 reports for 1991 (to 18 June 1991)

DIAGNOSIS	STATE	SOURCE TISSUE	SEX & AGE
Meningitis	NSW (2) ACT (1)	CSF	Female: 26yrs, 1 no age Male <1 mth
Septicaemia	NSW (1)	CSF	1 week
Other CNS disease	NSW (1)	Nasopharyngeal	Female, 6yrs
PUO	NSW (1)	Urine	Female, <1 mth
	SA (1)	Faeces	Male, 4yrs
General malaise	Vic (1)	Nasopharyngeal	Male, 1yr
Respiratory	Vic (1) NSW (2) SA (1)	Nasopharyngeal	Male: 1mth, 3mth, 1yr, 9yrs
Gastrointestinal	NSW (5)	Faeces	Male: 3yrs, 1 no age Female: 2yrs, 3yrs, 1 no age
Not stated	NSW (8)	Faeces (5)	Male: 1 mth, 4 no age
		Nasopharyngeal (1)	Male, 8 mths
		Throat (2)	Female: 1yr, 1 no age

Table 2. Coxsackievirus type B5 reports for 1991 (to 18 June 1991)

DIAGNOSIS	STATE	SOURCE TISSUE	SEX & AGE
Meningitis	Vic (2) SA (1)	CSF	Male, 24yrs Female: 4mths, 22yrs
Other CNS disease	SA (1)	CSF	Male, no age
	Vic (1)	Nasopharyngeal	Male, 9 yrs
General malaise	Vic (1)	Nasopharyngeal	1 month
Respiratory	Vic (1)	Lung biopsy	Female, 62 yrs
	SA (1)	Faeces	Female, 2 yrs
	NSW (1)	Nasopharyngeal	Female, 5 mths
Gastrointestinal	NSW (6)	Faeces	Female, 1 yr
			Male: 9 mths, 4 1yr 1 no age or se
Not Stated	NSW (2)	Faeces	Female, no age
		Throat	Female, 10 yrs

Table 3. Coxsackievirus type A9 reports for 1991 (to 18 June 1991)

DIAGNOSIS	STATE	SOURCE TISSUE	SEX & AGE
Meningitis	Vic (6)	CSF (5)	Female: 5yrs, 11yrs, 24yrs, 26yrs Male, no age
		Faeces (1)	Female, no age
Encephalitis	NSW (1)	Faeces	Male, 4yrs
Skin	NSW (3)	Nasopharyngeal	Male, 1yr
		Throat	Female, 1yr
		Skin	Male, 12yrs
Respiratory	Vic (5)	Nasopharyngeal	Female, 2yrs Male: 1yr, 2yrs, 16yrs, 35yrs
Not stated	NSW (1)	Faecal	Female, 1yr

NATIONAL NOTIFIABLE DISEASE REPORTS 28/4/91-25/5/91

DISEASES	ACT	NSW*	NT	QLD	SA	TAS	VIC	WA	TOTAL
Arbovirus Infections (unspecified)	0	2	0	124	0	1	0	0	127
Ross River Virus	0	0	0	0	0	0	0	0	0
Dengue fever	0	NN	0	0	0	0	0	0	0
Brucellosis	0	0	0	1	0	0	0	0	1
Campylobacter	1	0	0	133	96	62	0	0	292
Chancroid	0	NN	0	0	NN	NN	NN	0	0
Chlamydia	0	0	0	121	87***	46	NN	0	254
Cholera	0	0	0	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0	0	0	0
Donovanosis	0	NN	0	1	NN	NN	NN	0	1
Gonoccocal diseases	0	5	5	21	56***	NN	0	0	87
Haemophilus influenzae b	0	5	0	8	0	0	0	0	12
HIV infections	0	N/A	0	0	0	1	0	0	1
Hydatid disease	0	0	0	0	0	1	0	0	1
Legionnaires disease	NN	0	0	0	2	0	0	0	2
Leprosy	0	0	0	0	0	0	0	0	0
Leptospirosis	0	1	0	4	3	0	0	0	8
Listeriosis	0	NN	0	0	0	0	0	0	0
Lymphogranuloma venereum	0	NN	NN	0	NN	NN	NN	NN	0
Malaria	0	4	0	3	1	2	0	0	10
Measles	1	2	0	7	12	4	0	0	26
Meningococcal infections	0	3	0	0	2	2	0	0	7
Ornithosis	0	NN	0	0	0	0	0	0	0
Pertussis	0	0	0	3	2	0	0	0	5
Plague	0	NN	0	0	0	0	0	0	0
Poliomyelitis	0	0	0	0	0	0	0	0	0
Q fever	0	4	0	15	0	0	0	0	19
Rabies	NN	0	0	0	0	0	0	0	0
Rubella	0	NN	0	85	0	0	0	0	85
Salmonella	1	20	0	0	30	12	0	0	63
Shigella	0	0	0	6	12	0	0	0	18
Syphilis	0	6	3	17	10***	1	0	0	37
Tetanus	0	1	0	0	0	0	0	0	1
Tuberculosis	0	8**	0	2	7	0	0	0	17
Typhoid	0	0	0	0	0	0	0	0	0
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0
Viral hepatitis (unspecified)	0	23	0	0	1	0	0	NN	24
Hepatitis A	0	0	0	14	5	2	0	0	21
Hepatitis B	0	0	1	82	2	8	0	0	93
Hepatitis C	0	0	0	30	0	2	0	0	32
Yellow fever	0	0	0	0	0	0	0	0	0
Yersiniosis	0	0	0	17	17	0	0	0	34

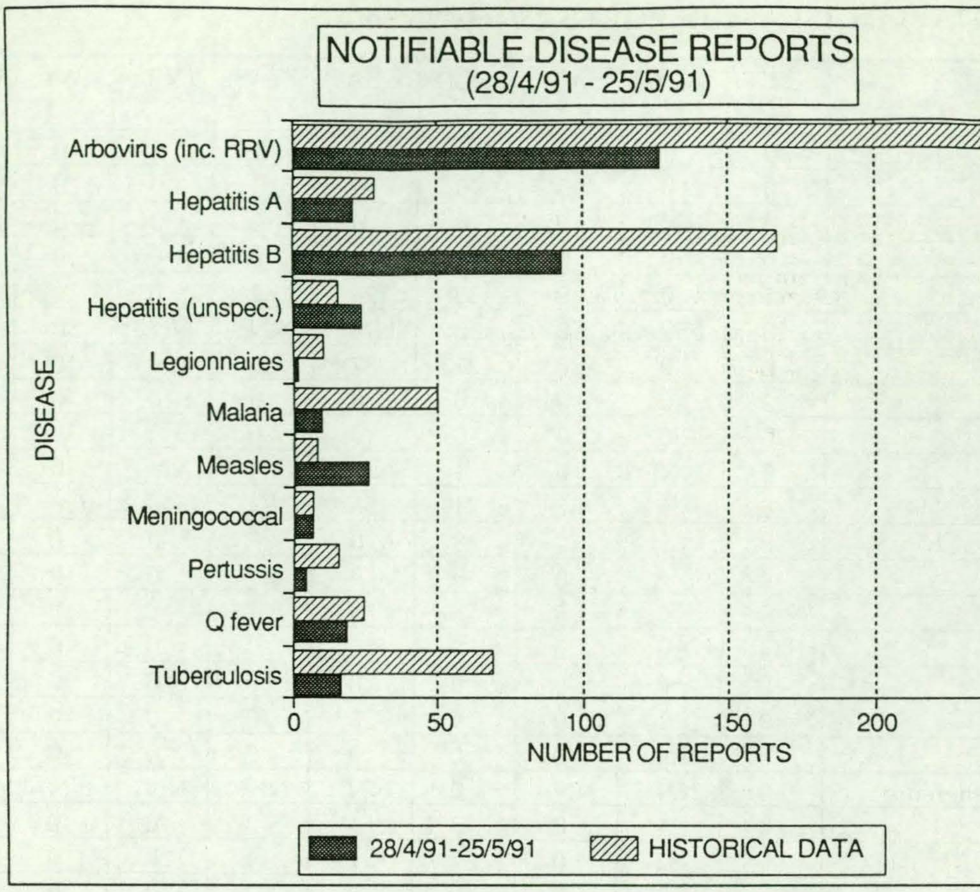
* data for May 1991

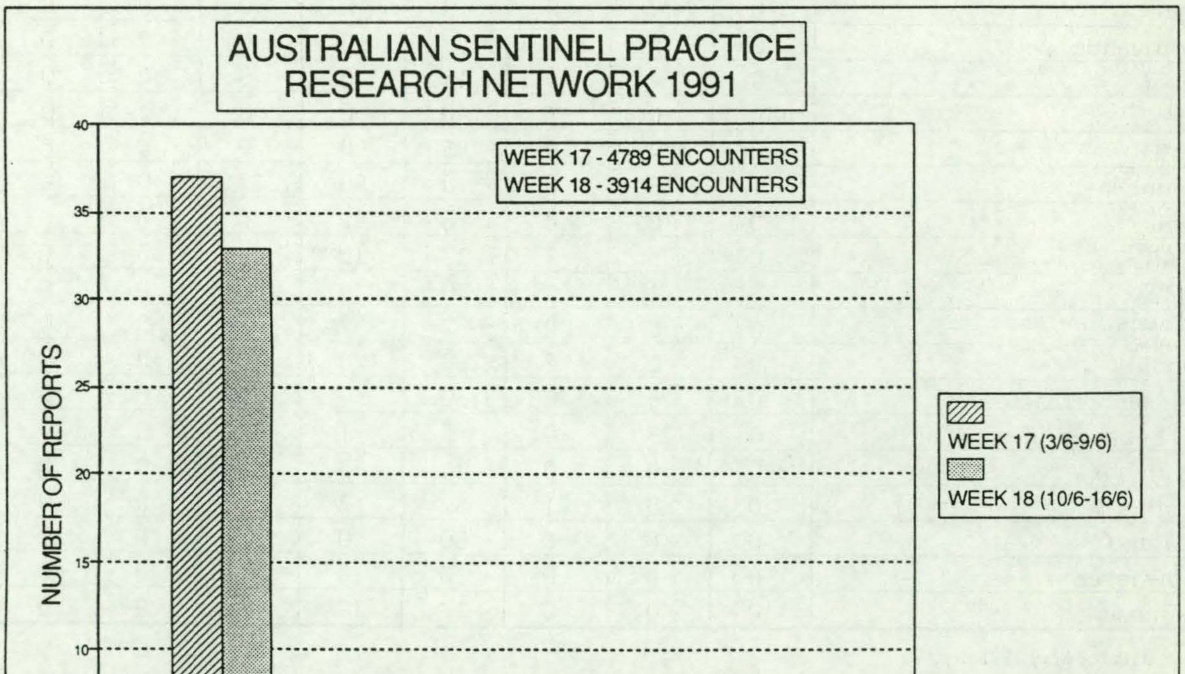
** mycobacterial infection

*** data to June 3 1991

NN not notifiable

N/A not available


NOTIFIABLE DISEASE REPORTS
(28/4/91 - 25/5/91)
DISEASE
Arbovirus (inc. RRV)
Hepatitis A
Hepatitis B
Hepatitis (unspec.)
Legionnaires
Malaria
Measles
Meningococcal
Pertussis
Q fever
Tuberculosis
0
50
100
150
200
250
NUMBER OF REPORTS
28/4/91-25/5/91
HISTORICAL DATA


AUSTRALIAN SENTINEL PRACTICE
RESEARCH NETWORK 1991
WEEK 17 - 4789 ENCOUNTERS
WEEK 18 - 3914 ENCOUNTERS
NUMBER OF REPORTS
40
35
30
25
20
15
10
5
0
INFLUENZA
GENITAL WARTS
MEASLES
MUMPS
PERTUSSIS
RUBELLA
WEEK 17 (3/6-9/6)
WEEK 18 (10/6-16/6)
ASPREN DATA MAY
BE SUBJECT TO
REVISION.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 05/06/91 TO 18/06/91

?
CODE 018 - MICROBIOLOGICAL DIAGNOSTIC UNIT, UNIVERSITY OF MELBOURNE (VIC)
CODE 019 - FAIRFIELD HOSPITAL, MELBOURNE (VIC)
CODE 065 - STATE HEALTH LABORATORY SERVICES, PERTH (WA)
CODE 066 - PRINCESS MARGARET HOSPITAL, PERTH (WA)
CODE 110 - INSTITUTE OF MEDICAL & VETERINARY SCIENCE, ADELAIDE (SA)
CODE 111 - ROYAL CHILDLDRENS HOSPITAL, MELBOURNE (VIC)
CODE 112 - INSTITUTE OF CLINICAL PATHOLOGY & MEDICAL RESEARCH, WESTMEAD (NSW)
CODE 113 - PRINCE HENRY/PRINCE OF WALES HOSPITALS, SYDNEY (NSW)
CODE 114 - ROYAL ALEXANDRA HOSPITAL FOR CHILDREN, CAMPERDOWN (NSW)
CODE 115 - STATE HEALTH LABORATORY, BRISBANE (QLD)
CODE 116 - WODEN VALLEY HOSPITAL, GARRAN (ACT)
CODE 400 - DR TB LYNCH, PATHOLOGIST, ROCKHAMPTON (QLD)
CODE TPL - TOOWOOMBA PATHOLOGY LABORATORY (QLD)

	/65	018	019	065	066	110	111	112	113	114	115	116	400	TPL	TOTAL
0100 ADENOVIRUS NOT TYPED	0	0	0	1	7	0	17	13	2	4	11	0	0	0	55
0101 ADENOVIRUS TYPE 1	0	0	2	0	0	0	0	1	0	0	0	0	0	0	3
0102 ADENOVIRUS TYPE 2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
0103 ADENOVIRUS TYPE 3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
0104 ADENOVIRUS TYPE 4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0105 ADENOVIRUS TYPE 5	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3
0108 ADENOVIRUS TYPE 8	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
0109 ADENOVIRUS TYPE 9	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0111 ADENOVIRUS TYPE 11	0	0	1	0	0	0	0	4	0	0	0	0	0	0	5
0128 ADENOVIRUS TYPE 28	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
0137 ADENOVIRUS TYPE 37	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
0199 ADENOVIRUS TYPING PENDING	0	0	2	0	0	0	2	0	1	0	0	0	0	0	5
0201 INFLUENZA A VIRUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0203 INFLUENZA B VIRUS	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
0206 INFLUENZA A H1N1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0302 PARAINFLUENZA VIRUS TYPE 2	0	0	1	0	1	5	2	0	0	0	3	0	0	0	12
0303 PARAINFLUENZA VIRUS TYPE 3	0	0	10	0	0	2	7	0	0	0	1	0	0	0	20
0399 PARAINFLUENZA VIRUS TYPING PEN	0	0	1	0	1	0	2	0	0	0	0	0	0	0	4
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	0	4	0	4	7	9	5	3	18	13	0	0	0	63
0500 RHINOVIRUS (ALL TYPES)	0	0	16	2	0	2	14	2	0	4	8	0	0	0	48
0600 MYCOPLASMA PNEUMONIAE	0	0	1	3	0	2	2	0	1	0	0	0	0	0	9
0650 MYCOPLASMA HOMINIS	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0700 ORNITHOSIS-PSITTACOSIS	0	0	5	0	0	0	0	0	1	0	0	0	0	0	6
0809 COXSACKIEVIRUS A9	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
0900 COXSACKIEVIRUS GROUP B - NOT T	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0902 COXSACKIEVIRUS B2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0904 COXSACKIEVIRUS B4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
0905 COXSACKIEVIRUS B5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1011 ECHOVIRUS TYPE 11	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1017 ECHOVIRUS TYPE 17	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1022 ECHOVIRUS TYPE 22	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
1101 rOLIOVIRUS TYPE 1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	3
1102 POLIOVIRUS TYPE 2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1103 POLIOVIRUS TYPE 3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1200 MUMPS VIRUS	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
1300 HERPES VIRUS GROUP - NOT TYPED	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6
1301 HERPES SIMPLEX VIRUS - NOT TYP	0	0	1	1	1	0	0	23	0	3	0	1	1	0	31
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	11	8	1	9	3	5	0	0	0	0	26	0	63
1303 VARICELLA-ZOSTER VIRUS	0	0	7	7	0	1	1	1	0	0	1	0	0	0	18
1306 HERPES SIMPLEX TYPE 1	0	1	70	23	1	14	2	5	12	0	12	1	0	0	141
1307 HERPES SIMPLEX TYPE 2	0	0	95	58	0	13	0	21	14	0	5	0	0	0	206
1399 HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1401 COXIELLA BURNETII	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1502 PICORNIA VIRUS - NOT TYPED = E	0	0	0	13	0	0	0	1	3	0	7	0	0	0	24
1521 MEASLES VIRUS	0	0	10	1	0	0	5	0	2	0	0	0	0	0	18
1522 RUBELLA VIRUS	0	0	3	1	0	0	0	0	1	0	0	0	3	0	8
1532 HEPATITIS B ANTIGEN	0	0	20	32	0	1	0	32	2	0	37	4	2	0	130
1535 HEPATITIS A ANTIBODY	0	0	4	13	0	0	0	4	1	0	2	0	1	0	25
1536 HEPATITIS C VIRUS	0	0	0	17	0	0	0	0	0	0	0	0	1	0	18
1537 HEPATITIS, DELTA	0	0	0	7	0	0	0	0	0	0	2	0	0	0	9
1541 CHLAMYDIA TRACHOMATIS - UNSPEC	1	0	3	31	0	23	2	4	0	1	15	0	0	5	85
1542 CHLAMYDIA TRACHOMATIS - A-K	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8
1556 CMV - CYTOMEGALOVIRUS	0	0	62	4	10	2	2	0	3	4	22	0	8	0	117
1563 CORONAVIRUS	0	0	2	0	0	0	0	1	0	0	0	0	0	0	3
1564 ROTAVIRUS	0	0	5	2	21	16	30	6	1	2	0	0	18	0	101
1565 CALICI VIRUS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1566 NORWALK AGENT	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1571 ENTEROVIRUS TYPE 71 (BCR)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1599 ENTEROVIRUS TYPING PENDING	0	0	0	0	0	1	2	0	8	6	0	0	0	0	17
9721 HTLV-1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9902 POXVIRUS GROUP NOT TYPED	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
9990 AUSTRALIAN ENCEPHALITIS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9992 ROSS RIVER VIRUS	0	0	2	4	0	0	0	0	0	0	0	0	14	0	20
9993 ASTROVIRUS	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
9994 SMALL VIRUS (LIKE) PARTICLE	0	0	2	0	0	0	0	1	0	0	0	0	0	0	3
9995 DENGUE NOT TYPED	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL	1	1	373	237	47	100	102	141	61	44	140	6	83	6	1342

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES BY STATE OF CONTRIBUTING LABORATORY

PERIOD 05/06/91 TO 18/06/91

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; DR TB LYNCH, PATHOLOGIST, ROCKHAMPTON.
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	ACT	TOTAL
0100	ADENOVIRUS NOT TYPED	0	19	17	11	8	0	0	55
0101	ADENOVIRUS TYPE 1	0	1	2	0	0	0	0	3
0102	ADENOVIRUS TYPE 2	0	0	3	0	0	0	0	3
0103	ADENOVIRUS TYPE 3	0	0	5	0	0	0	0	5
0104	ADENOVIRUS TYPE 4	0	0	1	0	0	0	0	1
0105	ADENOVIRUS TYPE 5	0	2	1	0	0	0	0	3
0108	ADENOVIRUS TYPE 8	0	0	3	0	0	0	0	3
0109	ADENOVIRUS TYPE 9	0	0	1	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	0	4	1	0	0	0	0	5
0128	ADENOVIRUS TYPE 28	0	0	2	0	0	0	0	2
0137	ADENOVIRUS TYPE 37	0	0	2	0	0	0	0	2
0199	ADENOVIRUS TYPING PENDING	0	1	4	0	0	0	0	5
0201	INFLUENZA A VIRUS	0	0	0	0	1	0	0	1
0203	INFLUENZA B VIRUS	0	1	0	0	0	2	0	3
0206	INFLUENZA A H1N1	0	0	1	0	0	0	0	1
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	3	3	1	5	0	12
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	17	1	0	2	0	20
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	3	0	1	0	0	4
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	26	13	13	4	7	0	63
0500	RHINOVIRUS (ALL TYPES)	0	6	30	8	2	2	0	48
0600	MYCOPLASMA PNEUMONIAE	0	1	3	0	3	2	0	9
0650	MYCOPLASMA HOMINIS	0	0	0	1	0	0	0	1
0700	ORNITHOSIS-PSITTACOSIS	0	1	5	0	0	0	0	6
0809	COXSACKIEVIRUS A9	0	0	5	0	0	0	0	5
0900	COXSACKIEVIRUS GROUP B - NOT T	0	0	0	0	1	0	0	1
0902	COXSACKIEVIRUS B2	0	0	1	0	0	0	0	1
0904	COXSACKIEVIRUS B4	0	1	0	0	0	0	0	1
0905	COXSACKIEVIRUS B5	0	0	1	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	0	0	1	0	0	0	0	1
1017	ECHOVIRUS TYPE 17	0	1	0	0	0	0	0	1
1022	ECHOVIRUS TYPE 22	0	1	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	5	0	0	0	0	0	5
1101	POLIOVIRUS TYPE 1	0	1	1	0	1	0	0	3
1102	POLIOVIRUS TYPE 2	0	0	1	0	0	0	0	1
1103	POLIOVIRUS TYPE 3	0	1	0	0	0	0	0	1
1200	MUMPS VIRUS	0	1	1	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	2	0	4	0	0	6
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	26	1	1	2	0	1	31
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	5	14	26	9	9	0	63
1303	VARICELLA-ZOSTER VIRUS	0	1	8	1	7	1	0	18
1306	HERPES SIMPLEX TYPE 1	0	17	73	12	24	14	1	141
1307	HERPES SIMPLEX TYPE 2	0	35	95	5	58	13	0	206
1399	HERPES VIRUS TYPING PENDING	0	0	0	1	0	0	0	1
1401	COXIELLA BURNETII	0	1	0	0	0	0	0	1
1502	PICORNIA VIRUS - NOT TYPED = E	0	4	0	7	13	0	0	24
1521	MEASLES VIRUS	0	2	15	0	1	0	0	18
1522	RUBELLA VIRUS	0	1	3	3	1	0	0	8
1532	HEPATITIS B ANTIGEN	0	34	20	39	32	1	4	130
1535	HEPATITIS A ANTIBODY	0	5	4	3	13	0	0	25
1536	HEPATITIS C VIRUS	0	0	0	1	17	0	0	18
1537	HEPATITIS, DELTA	0	0	0	2	7	0	0	9
1541	CHLAMYDIA TRACHOMATIS - UNSPEC	1	5	5	20	31	23	0	85
1542	CHLAMYDIA TRACHOMATIS - A-K	0	0	0	8	0	0	0	8
1556	CMV - CYTOMEGALOVIRUS	0	7	64	30	14	2	0	117
1563	CORONAVIRUS	0	1	2	0	0	0	0	3
1564	ROTAVIRUS	0	9	35	18	23	16	0	101
1565	CALICI VIRUS	0	1	0	0	0	0	0	1
1566	NORWALK AGENT	0	1	0	0	0	0	0	1
1571	ENTEROVIRUS TYPE 71 (BCR)	0	0	1	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	14	2	0	0	1	0	17
9721	HTLV-1	0	0	0	0	1	0	0	1
9902	POXVIRUS GROUP NOT TYPED	0	0	0	1	0	0	0	1
9990	AUSTRALIAN ENCEPHALITIS	0	0	0	0	1	0	0	1
9992	ROSS RIVER VIRUS	0	0	2	14	4	0	0	20
9993	ASTROVIRUS	0	2	0	0	0	0	0	2
9994	SMALL VIRUS (LIKE) PARTICLE	0	1	2	0	0	0	0	3
9995	DENGUE NOT TYPED	0	1	0	0	0	0	0	1
TOTAL		1	246	476	229	284	100	6	1342

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 05/06/91 TO 18/06/91

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	13	0	0	1	38	0	0	0	0	52
0101	ADENOVIRUS TYPE 1	0	2	0	0	0	1	0	0	0	0	3
0102	ADENOVIRUS TYPE 2	0	2	0	0	1	0	0	0	0	0	3
0103	ADENOVIRUS TYPE 3	0	2	0	0	0	0	0	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	1	0	0	0	2	0	0	0	0	3
0109	ADENOVIRUS TYPE 9	0	0	0	0	0	1	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	4	0	0	0	0	4
0128	ADENOVIRUS TYPE 28	0	0	0	0	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	1	0	0	0	2	0	0	0	1	4
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
0302	PARAINFLUENZA VIRUS TYPE 2	0	12	0	0	0	0	0	0	0	0	12
0303	PARAINFLUENZA VIRUS TYPE 3	0	19	0	0	0	1	0	0	0	0	20
0399	PARAINFLUENZA VIRUS TYPING PEN	0	4	0	0	0	0	0	0	0	0	4
0400	RESPIRATORY SYNCYTIAL VIRUS (R	3	59	0	0	0	0	0	0	0	0	62
0500	RHINOVIRUS (ALL TYPES)	0	39	0	0	0	1	0	0	0	1	41
0600	MYCOPLASMA PNEUMONIAE	1	6	0	0	0	0	0	0	0	0	7
0700	ORNITHOSIS-PSITTACOSIS	1	5	0	0	0	0	0	0	0	0	6
0809	COXSACKIEVIRUS A9	0	3	0	2	0	0	0	0	0	0	5
0900	COXSACKIEVIRUS GROUP B - NOT T	0	0	0	0	0	1	0	0	0	0	1
0902	COXSACKIEVIRUS B2	0	1	0	0	0	0	0	0	0	0	1
0904	COXSACKIEVIRUS B4	0	0	0	1	0	0	0	0	0	0	1
1017	ECHOVIRUS TYPE 17	0	0	0	1	0	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	5	0	0	0	0	5
1101	POLIOVIRUS TYPE 1	0	1	0	0	0	1	1	0	0	0	3
1103	POLIOVIRUS TYPE 3	1	0	0	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	1	0	1	1	1	0	0	0	0	2	6
1301	HERPES SIMPLEX VIRUS - NOT TYP	4	0	1	2	0	0	0	0	0	14	21
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	20	7	1	0	0	0	5	0	0	0	33
1303	VARICELLA-ZOSTER VIRUS	2	0	0	0	0	0	0	0	0	15	17
1306	HERPES SIMPLEX TYPE 1	5	4	0	0	0	0	2	1	0	67	79
1307	HERPES SIMPLEX TYPE 2	6	0	0	0	0	0	0	1	0	59	66
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	0	1	1
1502	PICORNIA VIRUS - NOT TYPED = E	2	9	0	0	0	6	1	0	0	0	18
1521	MEASLES VIRUS	5	0	0	0	0	0	0	0	0	12	17
1522	RUBELLA VIRUS	1	0	0	0	0	0	0	0	0	2	3
1532	HEPATITIS B ANTIGEN	68	0	0	0	0	0	57	0	0	0	125
1535	HEPATITIS A ANTIBODY	7	0	0	0	0	0	18	0	0	0	25
1536	HEPATITIS C VIRUS	12	0	0	0	0	0	6	0	0	0	18
1537	HEPATITIS, DELTA	7	0	0	0	0	0	2	0	0	0	9
1541	CHLAMYDIA TRACHOMATIS - UNSPEC	16	2	0	0	0	0	0	0	0	0	18
1542	CHLAMYDIA TRACHOMATIS - A-K	1	0	0	0	0	1	0	0	0	0	2
1556	CMV - CYTOMEGALOVIRUS	9	29	1	0	1	1	2	1	3	0	47
1563	CORONAVIRUS	0	0	0	0	0	3	0	0	0	0	3
1564	ROTAVIRUS	7	2	0	0	0	90	0	0	0	0	99
1565	CALICI VIRUS	0	0	0	0	0	1	0	0	0	0	1
1566	NORWALK AGENT	0	0	0	0	0	1	0	0	0	0	1
1571	ENTEROVIRUS TYPE 71 (BCR)	0	0	0	0	0	0	0	0	0	1	1
1599	ENTEROVIRUS TYPING PENDING	0	2	0	4	0	8	0	0	0	0	14
9721	HTLV-1	1	0	0	0	0	0	0	0	0	0	1
9992	ROSS RIVER VIRUS	6	0	0	0	0	0	0	0	0	1	7
9993	ASTROVIRUS	0	0	0	0	0	2	0	0	0	0	2
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	3	0	0	0	0	3
9995	DENGUE NOT TYPED	0	0	0	0	0	1	0	0	0	0	1
TOTAL		186	228	4	11	4	175	94	3	3	176	884

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2

PERIOD 05/06/91 TO 18/06/91

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	1	0	1	0	3
0103	ADENOVIRUS TYPE 3	3	0	0	0	0	0	0	0	0	0	3
0104	ADENOVIRUS TYPE 4	1	0	0	0	0	0	0	0	0	0	1
0108	ADENOVIRUS TYPE 8	3	0	0	0	0	0	0	0	0	0	3
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	0	0	0	1	0	1
0128	ADENOVIRUS TYPE 28	0	0	0	0	0	0	0	1	0	0	1
0137	ADENOVIRUS TYPE 37	2	0	0	0	0	0	0	0	0	0	2
0199	ADENOVIRUS TYPING PENDING	1	0	0	0	0	0	0	0	0	0	1
0203	INFLUENZA B VIRUS	0	0	0	0	0	0	0	0	1	0	1
0206	INFLUENZA A H1N1	0	0	0	0	0	0	0	1	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	0	1	0	1
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	2	3	2	0	7
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	2	0	0	2
0650	MYCOPLASMA HOMINIS	0	1	0	0	0	0	0	0	0	0	1
0905	COXSACKIEVIRUS B5	0	0	0	0	0	0	0	1	0	0	1
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	0	0	0	0	1	1
1022	ECHOVIRUS TYPE 22	0	0	0	0	0	0	0	0	1	0	1
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	1	0	0	0	0	1
1200	MUMPS VIRUS	0	0	1	0	0	0	0	0	1	0	2
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	7	0	0	0	0	0	0	3	0	10
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	10	5	2	0	1	8	4	0	30
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	1	0	1
1306	HERPES SIMPLEX TYPE 1	11	41	0	0	0	0	0	3	7	0	62
1307	HERPES SIMPLEX TYPE 2	0	137	0	0	0	0	0	0	3	0	140
1401	COXIELLA BURNETII	0	0	0	0	0	0	0	0	1	0	1
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	1	0	0	0	0	2	3	0	6
1521	MEASLES VIRUS	0	0	1	0	0	0	0	0	0	0	1
1522	RUBELLA VIRUS	0	0	0	0	1	0	0	1	3	0	5
1532	HEPATITIS B ANTIGEN	0	0	1	0	0	0	0	1	3	0	5
1541	CHLAMYDIA TRACHOMATIS - UNSPEC	8	59	0	0	0	0	0	0	0	0	67
1542	CHLAMYDIA TRACHOMATIS - A-K	1	3	2	0	0	0	0	0	0	0	6
1556	CMV - CYTOMEGALOVIRUS	3	2	0	1	0	2	2	9	50	1	70
1564	ROTAVIRUS	0	0	0	0	0	0	1	0	1	0	2
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	3	0	0	0	3
9902	POXVIRUS GROUP NOT TYPED	0	0	1	0	0	0	0	0	0	0	1
9990	AUSTRALIAN ENCEPHALITIS	0	0	0	0	0	0	0	0	1	0	1
9992	ROSS RIVER VIRUS	0	0	0	0	12	0	0	0	1	0	13
TOTAL		34	250	17	6	15	3	10	32	89	2	458