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Communicable Diseases Intelligence

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Contents:

Editor *Dr Robert Hall*

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

In this period (19 July to 1 August 1990) there were 1459 reports processed.

A single case of Q-fever in a 29-year-old female was reported during the period. No details of occupational exposure were supplied.

Chlamydia A-C trachomatis was isolated from a 26-year-old male with a massive inguinal lymph node.

Cytomegalovirus was isolated from 3 males. Two, 30 and 43-years-old, were reported as HIV positive. The other, a 50-year-old, was a transplant patient.

There was a single report of an as yet unidentified flavivirus. The patient, a 49-year-old male, had recently visited Papua New Guinea.

One influenza B case was reported - a 69-year-old male who had recently visited Thailand and Singapore.

Editorial Staff: Mr Geoff Davis, Ms Evon Bowler, Ms Lenore Cupitt

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

- Figures given may be subject to revision.

Calicivirus was identified in 3 patients presenting with gastro-intestinal disease (2 males, 1 female; one male 10-years-old, other ages not stated).

The July period report from a non-reporting scheme laboratory includes two cases of Q-fever (one meatworker, one grazier - ages, sexes not stated) and two Hepatitis C.

There were 294 reports of respiratory syncytial virus, bringing the total for the year to 1754. This seasonal increase continues to be above the average observed for the years 1982-1989 (see figure 1.) but current reporting trends indicate it is unlikely to rival the level of activity in 1989 which saw 3086 cases reported for the full year (see figure 2.).

Figure 1.

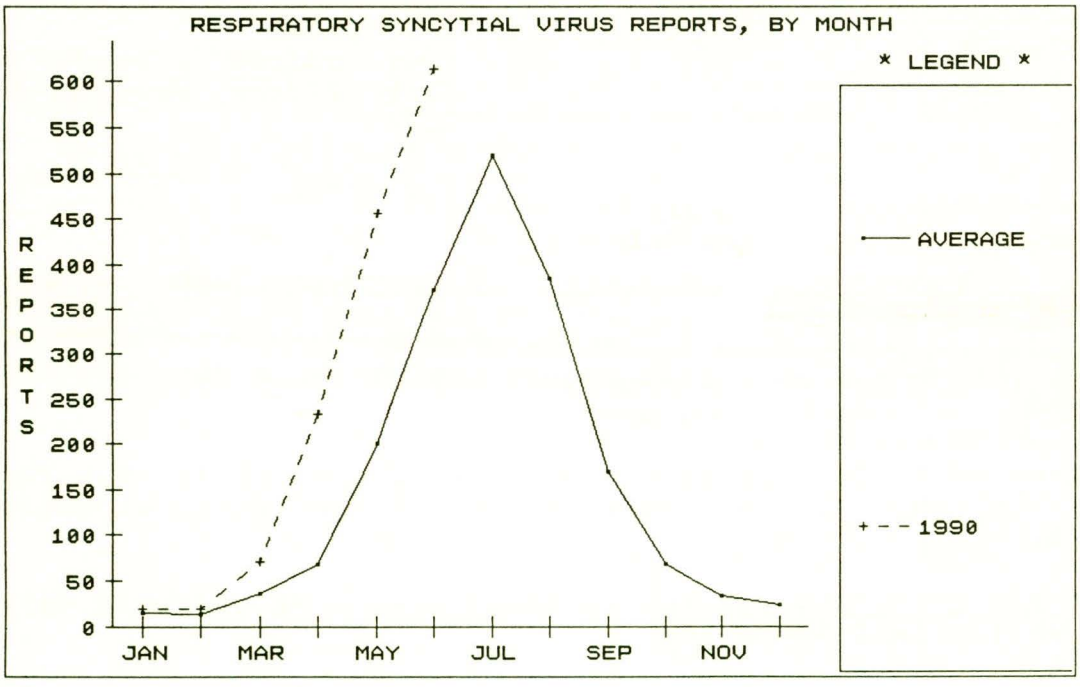
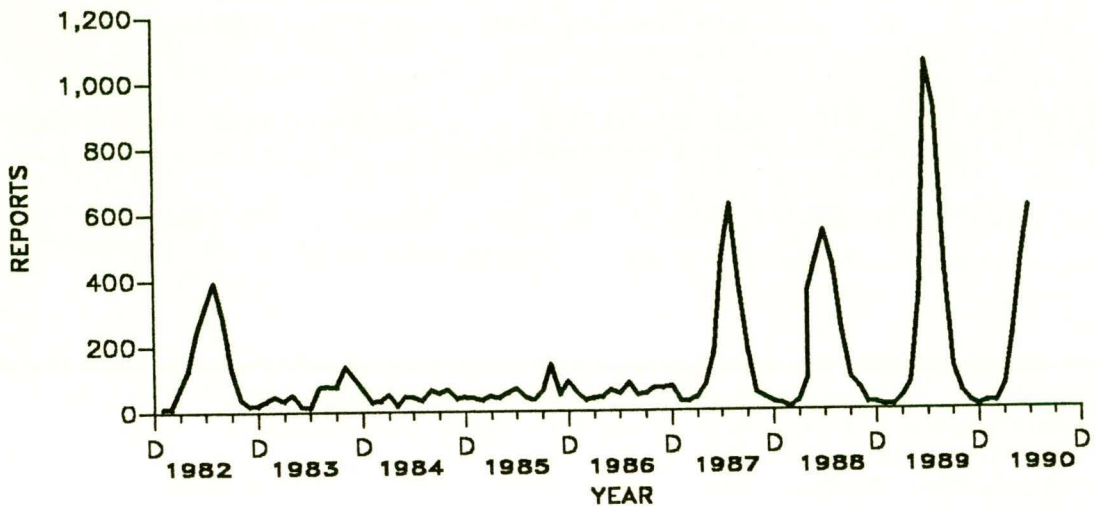


Figure 2. Respiratory Syncytial virus reports: 1982 - June 1990



PATHOGEN REPORTING SCHEME

The CDI Pathogen Reporting Scheme received a report of *Candida albicans* peritonitis in June 1990, the case being a 72-year-old female who presented with a ruptured gall bladder and bile peritonitis.

A single case of melioidosis was also reported. No details were provided.

OVERSEAS BRIEFS

1. CHOLERA IN NEPAL

Further details of the Nepal cholera outbreak (first reported CDI 90/15) have been received.

A recent report (25 July 1990) mentions that the Nepal Health Authorities have recorded up to 200 fatalities since the outbreak. Cases are now being reported from other parts of the country, in particular the western region. Contaminated water supplies are considered to be the main infection source. Limited chlorination has been initiated in some areas but travellers are strongly recommended to adhere to the normal precautions regarding drinking water and food.

2. CHOLERA IN ROMANIA

Cholera activity has been reported in the delta region of the Danube River. In the period 20 July to 6 August 1990 a total of 35 cases have been reported from the towns of Tulcea and Galati.

3. CHOLERA IN IRAQ

An outbreak of cholera has recently been reported from southern Iraq. No other details are available at this stage.

AUSTRALIAN HIV SURVEILLANCE REPORT: 13 JULY 1990

The National Centre in HIV Epidemiology and Clinical Research reports that as at 15 June 1990, a total of 1927 cases of AIDS had been reported in Australia.

For the most recent reporting period, 19 May to 15 June (weeks 21-24), 16 new cases of AIDS were reported in Australia.

Table 1: New cases of AIDS and deaths from AIDS for the period 19 May to 15 June (weeks 21 - 24), and cumulative cases and deaths to 15 June 1990, by sex and State in which initial diagnosis was made.

State/ Territory	1990 Weeks 21 - 24				1982 - 1990 Cumulative to 15 June 90			
	Cases		Deaths		Cases		Deaths	
	M	F	M	F	M	F	M	F
NSW	12	0	3	0	1174	34	734	24
VIC	4	0	3	0	386	9	201	5
QLD	0	0	0	0	129	6	84	4
WA	0	0	0	0	81	6	40	2
SA	0	0	1	0	61	2	35	1
NT	0	0	0	0	3	0	2	0
TAS	0	0	2	0	10	1	5	1
ACT	0	0	1	0	25	0	15	0
Total	16	0	10	0	1869	58	1116	37

Table 2: Notifications of persons newly diagnosed as HIV antibody positive, period 19 May to 15 June (weeks 21 - 24) and cumulative since the introduction of HIV antibody testing to 15 June 1990, by sex and State/Territory of notification.

State/ Territory	1990 Weeks 21 - 24			1985 - 1990 Cumulative to 15 June 90			
	M	F	TOTAL	M	F	NK	TOTAL
NSW	-	-	N/A #	5,250	293	2,766	8,309 +
VIC	27	0	27	2,290	62	0	2,352
QLD	5	0	5	868	31	0	899
WA	3	0	3	502	28	0	530
SA	-	-	N/A #	333	27	34	394 *
NT	2	0	2	49	3	0	52
TAS	0	1	1	49	3	0	52
ACT	1	0	1	8	0	97	105
Total	38	1	39	9,349	447	2,897	12,693

NK Sex not known

\# Notifications not available

\+ Cumulative to 30 June 1989; see 23 March 1990 Report for further details

* Cumulative to 18 May 1990.

INFLUENZA UPDATE FROM THE NATIONAL WHO INFLUENZA REFERENCE CENTRE CSL - No 2, WEEK COMMENCING 30 JULY 1990

Australia

To date the Australian winter has been virtually influenza-free, despite the grave predictions which appeared in the local media some months ago.

The WHO National Influenza Centre received only its third Australian isolate for the year this week. This most recent isolate was submitted by the State Health Laboratories, Western Australia, from a specimen taken in early July from a 5½ year old boy. Typing of the Brisbane influenza virus isolate reported in CDI 90/15 suggest that the virus is closely related to the A/Sichuan/2/87 strain.

Few clinical specimens have been received at CSL in the past two weeks. Only one Parainfluenza Type 1 and two Rhinoviruses have been isolated and confirmed to date.

Whilst this has been a quiet season to date, the time of occurrence of influenza can vary quite markedly in Australia. The best and most detailed Australian records available to us are those from Fairfield Hospital detailing the incidence of cases from 1957 to 1988. During that period there have been six years (1972, 1975, 1978, 1980, 1984 and 1987) when influenza occurred late - commencing in August and peaking as late as October. In 1972 there was a substantial outbreak of H3 influenza with 141 isolates at Fairfield. CSL and CDI records showed a late peak last year (1989), with few cases in July and the majority in August-September.

The average peak of influenza activity occurs in July for Victoria and August for Australia as a whole, i.e. it isn't too late yet!

Oceania

Papua New Guinea

Among the H1 isolates received from the PNG outbreak in March was one H3 strain. This strain has been typed with existing antisera as A/Sichuan/87-like.

New Zealand

The virus isolates received from New Zealand have been passaged into eggs but are giving a generally poor reaction with typing sera - as is often seen with early egg-passaged virus. The reactions of one strain, A/Waikato/11/90 again suggest a virus close to A/Sichuan.

No further reports of virus isolates have been received from Oceania.

Worldwide

The two most recent editions of the WHO Weekly Epidemiological Record have carried no further reports of influenza activity and no additional reports have been received from other sources.

GONOCOCCAL SURVEILLANCE - AUSTRALIA, 1 JANUARY - 31 MARCH, 1990

(Contributed by the Australian Gonococcal Surveillance Programme - Co-ordinator, Dr J W Tapsall, The Prince of Wales Hospital, NSW 2031)

This report analyses the penicillin sensitivity of 545 isolates examined in participating laboratories in the three month period ending 31 March 1990.

These laboratories are located in the capital cities of each State and Territory and receive samples from public and private sector laboratories throughout each State. For example, data is derived from such regional centres as Geelong, Gippsland and Mildura in Victoria, and strains from Alice Springs are examined in the laboratories of the Institute of Medical and Veterinary Science, Adelaide. The participation of these laboratories adds an important perspective to the findings of the Australian Gonococcal Surveillance Program.

The Table provides data on the percentage of strains examined in each mainland capital which fell into the categories of "fully sensitive" or "less sensitive" to penicillin (see Table footnotes) or which were penicillinase producing strains (PPNG). Not shown in the Table are data on strains isolated in other centres including Canberra, Hobart, Darwin and Alice Springs.

Levels of intrinsic resistance to penicillin have shown a tendency to increase over recent surveys and there was little change in this pattern in this quarter. Strains relatively resistant to penicillin, that is those isolates where the MIC of penicillin is 1.0 mg/L or greater, accounted for 4.2% of all isolates. In Sydney isolates of this type outnumbered the fully sensitive isolates and represented 7.5% of all cultures. In other centres only small numbers of relatively resistant strains were isolated.

There were 79 isolates of PPNG in this quarter, representing 14.5% of all strains. From the Table it would appear that the isolation rates of PPNG in all centres differed little. Previously the rate in Sydney was much higher. The PPNG rate in Sydney declined and that in some other centres increased to account for this change. However, it is necessary to point out that the pattern of infection differs substantially in different parts of the country. Where the geographic site of acquisition was ascertained, half the PPNG isolates in Sydney were found to have been acquired locally. In Melbourne 19 of 26 patients acquired their PPNG overseas or else

were the immediate contact of such a patient. In Adelaide, no case of sustained domestic transmission of PPNG was recorded. A number of cases of locally-acquired PPNG infection were noted in Brisbane and Perth.

In this quarter, if data from some additional reporting centres such as Alice Springs are excluded, the total number of isolates examined is virtually identical with that recorded in the corresponding quarters in 1988 and 1989.

Table: Penicillin sensitivity of isolates of *N. gonorrhoeae*, 1 January-31 March 1990
Bracketed figures represent data from the corresponding period in 1989.

Centre	Sensitive*	Less Sensitive**	PPNG
Brisbane	17.1 (13.3)	52 (56.2)	17.1 (18.1)
Sydney	3.8 (2.6)	58 (51.8)	16.6 (41.1)
Melbourne	6.9 (7.6)	59.7 (56.)	16.4 (16.4)
Adelaide	4.8 (25.5)	57.2 (67.5)	19.0 (4.0)
Perth	12 (0)	60 (53)	19.0 (19.0)

* Sensitive, MIC = 0.004 - 0.016 mg/L
** Less Sensitive, MIC = 0.06 - 0.25 mg/L
PPNG = Penicillinase producing *N. gonorrhoeae*

CDI Editorial Comment

CDI notes that the AGSP has recently been invited by the World Health Organisation to help plan and implement a global WHO programme on surveillance of the antibiotic susceptibility of *N. gonorrhoeae*. Four centres in the world have been assigned this task, with AGSP having coverage of the Asia (North and South) and Pacific regions. As a consequence the Laboratory will be designated as a WHO collaborating laboratory.

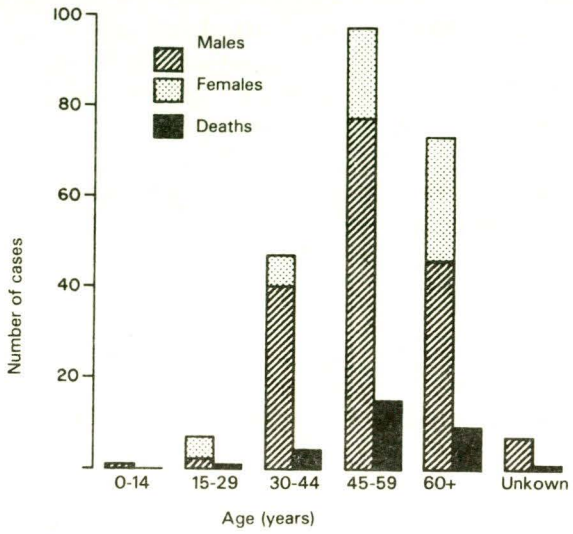
LEGIONNAIRES' DISEASE SURVEILLANCE: ENGLAND AND WALES, 1989

(Based WER 1990, 22:170-171)

In 1989, a provisional total of 232 cases of Legionnaires' disease in residents of England and Wales were reported to the National Surveillance Scheme for Legionnaires' Disease at the Communicable Disease Surveillance Centre. This compares with 278 cases in 1988 and 206 cases in 1987.

One hundred and seventy-three cases (75%) were male, ranging in age from 18 months to 89 years, with an average age of 53 years. The 59 female cases were aged between 16 and 89 years, with an average age of 56 years (Figure 3). Thirty cases died (23 males and 7 females). Eight cases of Pontiac fever were also reported (7 males and 1 female), aged between 17 and 73 years.

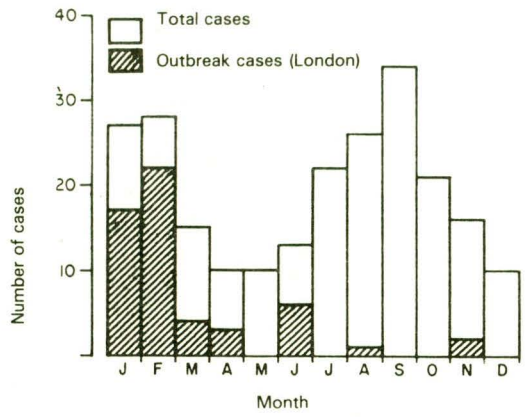
Figure 3. Sex and age distribution of cases of Legionnaires' disease, England and Wales, 1989



Isolates were obtained from 40 (17%) of the cases of Legionnaires' disease; 38 isolates were *Legionella pneumophila*, of which 34 were *L. pneumophila* serogroup 1; 2 were serogroup 3; and 2 serogroup 8. One isolate was *L. bozemanii* and the remaining one was of an unspecified *Legionella*. In a further 111 cases (48%), the diagnosis was confirmed by a four-fold rise in antibody titres to *L. pneumophila* and in the remaining 81 cases (35%) a presumptive diagnosis was made on the basis of a single high antibody titre.

As in other years, most of the cases occurred in the summer and autumn months. In 1989, however, many cases also occurred in January and February due to 2 outbreaks in London involving 34 cases (Figure 4).

Figure 4. Seasonal distribution of cases of Legionnaires' disease England and Wales, 1989



Five outbreaks were ascertained in England and Wales during 1989.

In 1988, 3 probable nosocomial cases of Legionnaires' disease were reported in patients associated with a Nottinghamshire hospital. In 1989, a further 10 cases associated with the same hospital were reported, including 9 patients and 1 member of staff. No further cases have been reported from this hospital since August 1989. There were 3 other probable nosocomial cases in England and Wales in 1989 and another 3 which were possibly hospital-related.

Eighty-eight cases of Legionnaires' disease were associated with travel abroad in the 2 weeks before the onset of illness.

Eighty-one cases of Legionnaires' disease (35%) were sporadic (not known to be associated with an outbreak or travel and not hospital-acquired). Of the 81 sporadic cases, 60 were males aged between 19 and 89 years, and 21 cases were females aged 20 to 85 years.

ACUTE SCHISTOSOMIASIS IN U.S. TRAVELLERS RETURNING FROM AFRICA

(Based MMWR 1990, 39(9) 141-148)

In December 1988 and May 1989, the Centers for Disease Control (CDC) was notified that members of two groups of travellers who had recently returned to the United States from Botswana and Cote d'Ivoire, respectively, had experienced illnesses characterised by an influenza-like syndrome and eosinophilia. Subsequent investigations documented the occurrence of acute schistosomiasis in each group.

Botswana. From September 14 to October 2, 1988, a group of 16 persons visited the Okavango Delta region of Botswana. Twelve of 13 travellers who responded to mailed questionnaires reported contact with fresh water (e.g., wading, swimming, bathing, washing, and boating) while in this region. None reported recent water contact in other geographic areas in which schistosomiasis was endemic. Within 5 weeks of the expedition, 11 persons had onset of symptoms that included fatigue, fever, sweats, chills, headache, and gastrointestinal discomfort. These symptoms lasted 1-30 days (mean: 8 days) and recurred in five persons 11-20 days (mean: 15 days) after the initial episode.

Complete blood counts done for six persons found peripheral eosinophilia (range: 10%-57%; normal: 0-4%). Of faecal specimens for 11 persons, nine contained small numbers of *Schistosoma* eggs having characteristics of both *S. mansoni* and *S. rodhaini*. Urine samples from three persons were negative for ova of *S. haematobium*. Fifteen travellers submitted serum specimens, and all were positive for antibodies to *Schistosoma sp.* The one member of the group who did not submit a serum sample reportedly had *S. mansoni* ova in a stool specimen.

Persons with positive faecal and/or serologic specimens were treated with a single oral dose of praziquantel (40 mg/kg). All symptoms resolved after treatment, and no serious adverse reactions to therapy were reported. Twelve of the 13 travellers who completed questionnaires were aware of the risks of acquiring malaria and diarrhoeal illness in this region; seven reported having been advised about the risks for schistosomiais.

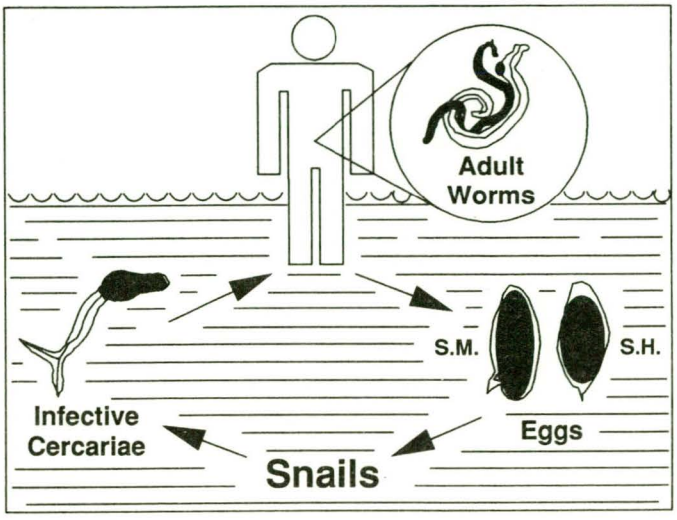
Cote d'Ivoire. From March 1 to April 15, 1989, eight persons travelled to a remote rural area of western Cote d'Ivoire. During their visit, seven members of this group were briefly in contact (bathing, wading, and/or swimming) with fresh river water. None had recently travelled to other areas in which schistosomiasis was endemic.

All seven persons reported transient pruritus immediately after their exposures. Two to 4 weeks later, six of these seven persons developed symptoms including fever, chills, fatigue, headache, and gastrointestinal discomfort. Initial symptoms lasted 2-25 days (mean: 12 days) but recurred within 1-4 weeks in all six patients. Four persons required hospitalisation, and five were treated presumptively for malaria. Eosinophilia (range: 15%-48%) occurred in all patients. Faecal examinations in four persons detected ova of *S. mansoni*; egg counts were low and ranged from 16 to 24 eggs per gram of faeces. For all seven persons, urine examinations were negative for *Schistosoma* ova. For six persons, serum specimens were positive for antibodies to *Schistosoma sp.* All six were successfully treated with praziquantel.

Each of these seven travellers had received pre-travel health advice and were taking malaria prophylaxis. Four were advised about methods for avoiding diarrhoeal illness; one was cautioned regarding the potential risks for schistosomiasis.

MMWR Editorial Note. The occurrence of these outbreaks within a 9-month period and the high infection rates emphasize that schistosomiasis poses a continuing hazard for persons travelling in areas in which the disease is endemic. Reports of at least five similar outbreaks among U.S. and European tourists since 1975 have indicated similarly high infection rates (range: 55%-100%; mean: 77%). In these five outbreaks, symptoms of acute schistosomiasis (Katayama syndrome) were reported to occur in 40%-93% (mean: 76%) of those infected (1-6). These symptoms are thought to result from an immunologic response to the maturation of adult worms and subsequent egg deposition in the vasculature surrounding the intestines and bladder (7) (Figure 5). Although the clinical outcome in travellers is usually benign, hospitalization is sometimes necessary, and manifestations can be severe. For example, in 1984, two U.S. students developed transverse myelitis and paraplegia after acquiring infection in Kenya (4).

Figure 5. Life cycle of human schistosomes represented by *S. mansoni* (S.M.) and *S. haematobium* (S.H.)



Free-swimming cercariae penetrate intact skin in contact with infected fresh water. Adults developing within the human host mate and begin depositing eggs in the vasculature surrounding the intestine and bladder. Eggs released into the stool or urine develop into forms infective for intermediate snail hosts when deposited into fresh water. Infected snails release cercariae to reinitiate the cycle.

Early manifestations of acute schistosomiasis are often non-specific and may easily be misdiagnosed. The diagnosis should be considered when eosinophilia is associated with fever, fatigue, headache, and/or gastrointestinal distress in persons who have been exposed to fresh water in areas in which schistosomiasis is endemic. Early diagnosis and treatment based on clinical, epidemiologic, and serologic criteria may be important in preventing serious sequelae (e.g., transverse myelitis) of acute infection. Screening stool and urine specimens for ova and parasites is the traditional method of diagnosis, but signs and symptoms of acute infection can occur before detectable egg excretion (8). Sensitive and specific serologic tests have recently been developed that can help establish the diagnosis before substantial egg deposition or excretion (9). Single-day therapy with praziquantel (40-60 mg/kg) is effective against all species of schistosomes (10). Although side effects to treatment have been reported, they are generally mild and transient (7).

Because there is no practical way to distinguish infected from non-infected water, all fresh water in schistosomiasis-endemic areas should be considered suspect. If fresh water contact is unavoidable, bathing water should be heated to 50°C (122°F) for 5 minutes or treated with iodine or chlorine in a manner similar to that used for treating drinking water. In addition, water can be

strained with paper filters or allowed to stand for 3 days before use. Vigorous towel drying and application of rubbing alcohol to exposed skin immediately after contact with untreated water may also help reduce cercarial penetration and subsequent infection (3,4).

Schistosomiasis is endemic in 74 countries in Africa, South America, the Caribbean, and Asia (10). Because travel to these areas is becoming increasingly popular, health-care providers should be aware of the clinical manifestations, methods for diagnosis, and appropriate treatment of this disease. In addition, health and travel professionals should provide more intensive preventive counselling to persons planning travel to areas endemic for schistosomiasis.

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

PERIOD 19/07/90 TO 01/08/90

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 HOSPI(ACT)TAS)
12. CODE RHH - ROYAL HOBART HOSPITAL (TAS)

		019	065	066	110	111	112	113	114	115	116	RHH	TOTAL
0100	ADENOVIRUS NOT TYPED	0	1	7	3	2	1	2	0	11	0	0	27
0101	ADENOVIRUS TYPE 1	2	0	0	5	0	3	0	0	0	0	0	10
0102	ADENOVIRUS TYPE 2	1	0	0	1	0	3	0	0	0	0	0	5
0103	ADENOVIRUS TYPE 3	1	0	0	1	0	3	0	1	0	0	0	6
0104	ADENOVIRUS TYPE 4	0	0	0	0	0	0	0	1	0	0	0	1
0105	ADENOVIRUS TYPE 5	0	0	0	0	0	1	0	0	0	0	0	1
0106	ADENOVIRUS TYPE 6	0	0	0	0	0	1	0	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	2	0	0	0	0	0	0	0	0	0	0	2
0135	ADENOVIRUS TYPE 35	1	0	0	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	4	0	1	0	0	0	0	5
0201	INFLUENZA A VIRUS	0	2	0	0	0	0	0	0	0	1	0	3
0203	INFLUENZA B VIRUS	1	1	0	0	0	0	0	0	0	1	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	6	0	2	11	1	1	0	0	2	0	0	23
0302	PARAINFLUENZA VIRUS TYPE 2	4	0	0	1	2	0	0	0	0	0	0	7
0400	RESPIRATORY SYNCYTIAL VIRUS (R	46	2	30	28	84	0	5	20	45	33	1	294
0500	RHINOVIRUS (ALL TYPES)	3	0	0	0	2	1	0	0	0	0	0	6
0600	MYCOPLASMA PNEUMONIAE	0	2	0	4	0	0	0	0	0	0	0	6
0700	ORNITHOSIS-PSITTACOSIS	2	0	0	1	0	0	1	0	0	0	0	4
0809	COXSACKIEVIRUS A9	0	0	0	0	0	1	0	0	0	0	0	1
0816	COXSACKIEVIRUS A16	1	0	0	0	0	0	0	0	0	0	0	1
0902	COXSACKIEVIRUS B2	0	0	0	0	0	1	0	0	0	0	0	1
0903	COXSACKIEVIRUS B3	0	0	0	1	0	1	0	0	0	0	0	2
0905	COXSACKIEVIRUS B5	0	0	0	0	0	0	0	1	0	0	0	1
0906	COXSACKIEVIRUS B6	0	0	0	0	0	1	0	0	0	0	0	1
1004	ECHOVIRUS TYPE 4	0	0	0	0	0	1	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	0	0	1	0	0	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	1	0	0	0	0	0	1
1014	ECHOVIRUS TYPE 14	0	0	0	0	0	1	0	1	0	0	0	2
1018	ECHOVIRUS TYPE 18	0	0	0	0	0	1	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	0	0	0	0	0	0	0	4	0	0	0	4
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	0	2	0	0	0	0	2
1101	POLIOVIRUS TYPE 1	0	0	0	1	0	3	0	0	0	0	0	4
1102	POLIOVIRUS TYPE 2	0	0	0	1	0	2	0	2	0	0	0	5
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	4	0	0	0	0	0	4
1200	MUMPS VIRUS	0	1	0	0	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	3	0	1	0	0	2	0	0	0	0	6
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	0	3	1	0	24	0	1	5	2	0	36
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	9	0	13	2	12	1	0	0	1	0	38
1303	VARICELLA-ZOSTER VIRUS	3	4	0	4	0	1	1	0	4	0	0	17
1306	HERPES SIMPLEX TYPE 1	43	41	0	12	1	4	11	7	43	0	2	164
1307	HERPES SIMPLEX TYPE 2	43	102	0	11	0	11	11	0	42	0	0	220
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	0	1	0	0	2
1401	COXIELLA BURNETII	0	0	0	2	0	1	0	0	0	0	0	3
1502	PICORNIA VIRUS - NOT TYPED = E	0	7	0	3	0	0	8	0	6	0	0	24
1521	MEASLES VIRUS	4	0	0	0	3	0	1	0	0	0	0	8
1522	RUBELLA VIRUS	2	1	0	0	0	0	0	0	0	0	0	3
1532	HEPATITIS B ANTIGEN	7	28	0	0	0	36	6	0	50	0	0	127
1535	HEPATITIS A ANTIBODY	1	3	0	0	0	0	0	0	0	0	0	4
1536	HEPATITIS C VIRUS	0	7	0	0	0	0	0	0	0	0	0	7
1541	CHLAMYDIA A - C. TRACHOMATIS	0	43	0	21	0	16	2	1	42	4	0	129
1556	CMV - CYTOMEGALOVIRUS	31	2	5	2	8	13	6	4	9	0	3	83
1563	CORONAVIRUS	0	0	0	0	0	1	0	0	0	0	0	1
1564	ROTAVIRUS	16	1	17	15	48	2	7	0	0	0	1	107
1565	CALICI VIRUS	0	0	0	0	0	3	0	0	0	0	0	3
1571	ENTEROVIRUS TYPE 71 (BCR)	1	0	0	0	0	0	0	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	3	0	10	2	0	0	0	15
9992	ROSS RIVER VIRUS	1	1	0	0	0	18	1	0	0	0	0	21
9995	DENGUE	0	1	0	0	0	0	0	0	0	0	0	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL		223	263	64	144	160	173	78	45	260	42	7	1459

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES BY STATE OF CONTRIBUTING LABORATORY

PERIOD 19/07/90 TO 01/08/90

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	TAS	ACT	TOTAL
0100	ADENOVIRUS NOT TYPED	3	2	11	8	3	0	0	27
0101	ADENOVIRUS TYPE 1	3	2	0	0	5	0	0	10
0102	ADENOVIRUS TYPE 2	3	1	0	0	1	0	0	5
0103	ADENOVIRUS TYPE 3	4	1	0	0	1	0	0	6
0104	ADENOVIRUS TYPE 4	1	0	0	0	0	0	0	1
0105	ADENOVIRUS TYPE 5	1	0	0	0	0	0	0	1
0106	ADENOVIRUS TYPE 6	1	0	0	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	0	2	0	0	0	0	0	2
0135	ADENOVIRUS TYPE 35	0	1	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	4	0	0	0	0	0	5
0201	INFLUENZA A VIRUS	0	0	0	2	0	0	1	3
0203	INFLUENZA B VIRUS	0	1	0	1	0	0	1	3
0301	PARAINFLUENZA VIRUS TYPE 1	1	7	2	2	11	0	0	23
0302	PARAINFLUENZA VIRUS TYPE 2	0	6	0	0	1	0	0	7
0400	RESPIRATORY SYNCYTIAL VIRUS (R	25	130	45	32	28	1	33	294
0500	RHINOVIRUS (ALL TYPES)	1	5	0	0	0	0	0	6
0600	MYCOPLASMA PNEUMONIAE	0	0	0	2	4	0	0	6
0700	ORNITHOSIS-PSITTACOSIS	1	2	0	0	1	0	0	4
0809	COXSACKIEVIRUS A9	1	0	0	0	0	0	0	1
0816	COXSACKIEVIRUS A16	0	1	0	0	0	0	0	1
0902	COXSACKIEVIRUS B2	1	0	0	0	0	0	0	1
0903	COXSACKIEVIRUS B3	1	0	0	0	1	0	0	2
0905	COXSACKIEVIRUS B5	1	0	0	0	0	0	0	1
0906	COXSACKIEVIRUS B6	1	0	0	0	0	0	0	1
1004	ECHOVIRUS TYPE 4	1	0	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	0	0	0	1	0	0	1
1011	ECHOVIRUS TYPE 11	1	0	0	0	0	0	0	1
1014	ECHOVIRUS TYPE 14	2	0	0	0	0	0	0	2
1018	ECHOVIRUS TYPE 18	1	0	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	4	0	0	0	0	0	0	4
1100	POLIOVIRUS NOT TYPED	2	0	0	0	0	0	0	2
1101	POLIOVIRUS TYPE 1	3	0	0	0	1	0	0	4
1102	POLIOVIRUS TYPE 2	4	0	0	0	1	0	0	5
1103	POLIOVIRUS TYPE 3	4	0	0	0	0	0	0	4
1200	MUMPS VIRUS	0	0	0	1	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	2	0	0	3	1	0	0	6
1301	HERPES SIMPLEX VIRUS - NOT TYP	25	0	5	3	1	0	2	36
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	13	2	0	9	13	0	1	38
1303	VARICELLA-ZOSTER VIRUS	2	3	4	4	4	0	0	17
1306	HERPES SIMPLEX TYPE 1	22	44	43	41	12	2	0	164
1307	HERPES SIMPLEX TYPE 2	22	43	42	102	11	0	0	220
1399	HERPES VIRUS TYPING PENDING	0	0	1	1	0	0	0	2
1401	COXIELLA BURNETII	1	0	0	0	2	0	0	3
1502	PICORNIA VIRUS - NOT TYPED = E	8	0	6	7	3	0	0	24
1521	MEASLES VIRUS	1	7	0	0	0	0	0	8
1522	RUBELLA VIRUS	0	2	0	1	0	0	0	3
1532	HEPATITIS B ANTIGEN	42	7	50	28	0	0	0	127
1535	HEPATITIS A ANTIBODY	0	1	0	3	0	0	0	4
1536	HEPATITIS C VIRUS	0	0	0	7	0	0	0	7
1541	CHLAMYDIA A - C. TRACHOMATIS	19	0	42	43	21	0	4	129
1556	CMV - CYTOMEGALOVIRUS	23	39	9	7	2	3	0	83
1563	CORONAVIRUS	1	0	0	0	0	0	0	1
1564	ROTAVIRUS	9	64	0	18	15	1	0	107
1565	CALICI VIRUS	3	0	0	0	0	0	0	3
1571	ENTEROVIRUS TYPE 71 (BCR)	0	1	0	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	12	3	0	0	0	0	0	15
9992	ROSS RIVER VIRUS	19	1	0	1	0	0	0	21
9995	DENGUE	0	0	0	1	0	0	0	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	0	1	0	0	0	0	0	1
TOTAL		296	383	260	327	144	7	42	1459

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 19/07/90 TO 01/08/90

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	1	8	0	0	1	10	0	0	0	2	22
0101	ADENOVIRUS TYPE 1	1	4	0	0	0	3	0	1	0	0	9
0102	ADENOVIRUS TYPE 2	0	2	0	0	0	1	0	0	0	0	3
0103	ADENOVIRUS TYPE 3	0	5	0	0	0	1	0	0	0	0	6
0104	ADENOVIRUS TYPE 4	0	1	0	0	0	0	0	0	0	0	1
0105	ADENOVIRUS TYPE 5	1	0	0	0	0	0	0	0	0	0	1
0106	ADENOVIRUS TYPE 6	0	0	0	0	0	1	0	0	0	0	1
0135	ADENOVIRUS TYPE 35	0	0	0	0	1	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	4	0	0	0	0	0	0	0	0	4
0201	INFLUENZA A VIRUS	0	2	0	0	0	0	0	0	0	0	2
0203	INFLUENZA B VIRUS	0	1	0	0	0	0	0	0	0	0	1
0301	PARAINFLUENZA VIRUS TYPE 1	1	22	0	0	0	0	0	0	0	0	23
0302	PARAINFLUENZA VIRUS TYPE 2	0	6	0	0	0	0	0	0	0	0	6
0400	RESPIRATORY SYNCYTIAL VIRUS (R	3	285	0	0	0	0	0	1	0	0	289
0500	RHINOVIRUS (ALL TYPES)	1	5	0	0	0	0	0	0	0	0	6
0600	MYCOPLASMA PNEUMONIAE	0	5	0	0	0	0	0	0	0	1	6
0700	ORNITHOSIS-PSITTACOSIS	0	3	0	0	0	0	0	0	0	0	3
0809	COXSACKIEVIRUS A9	0	1	0	0	0	0	0	0	0	0	1
0816	COXSACKIEVIRUS A16	0	0	0	0	0	0	0	0	0	1	1
0902	COXSACKIEVIRUS B2	0	0	0	0	0	1	0	0	0	0	1
0905	COXSACKIEVIRUS B5	0	1	0	0	0	0	0	0	0	0	1
0906	COXSACKIEVIRUS B6	0	0	0	0	0	0	1	0	0	0	1
1004	ECHOVIRUS TYPE 4	1	0	0	0	0	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	1	0	0	0	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	1	0	0	0	0	0	0	0	0	0	1
1014	ECHOVIRUS TYPE 14	1	0	0	0	0	1	0	0	0	0	2
1018	ECHOVIRUS TYPE 18	1	0	0	0	0	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	0	4	0	0	0	0	0	0	0	0	4
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	2	0	0	0	0	2
1101	POLIOVIRUS TYPE 1	1	1	0	0	0	1	0	0	0	0	3
1102	POLIOVIRUS TYPE 2	0	1	0	0	1	3	0	0	0	0	5
1103	POLIOVIRUS TYPE 3	3	0	0	0	0	1	0	0	0	0	4
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	1	0	0	0	0	0	0	5	6
1301	HERPES SIMPLEX VIRUS - NOT TYP	2	3	0	0	0	0	0	0	0	12	17
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	6	0	0	1	0	0	3	0	0	0	10
1303	VARICELLA-ZOSTER VIRUS	1	1	0	1	0	0	0	0	0	11	14
1306	HERPES SIMPLEX TYPE 1	6	12	0	0	0	0	0	0	0	103	121
1307	HERPES SIMPLEX TYPE 2	2	0	0	0	0	0	0	0	0	132	134
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	1	0	0	0	0	0	1
1401	COXIELLA BURNETII	1	0	0	0	0	0	0	0	0	0	1
1502	PICORNIA VIRUS - NOT TYPED = E	2	6	0	1	0	9	0	0	0	1	19
1521	MEASLES VIRUS	2	0	0	0	0	0	0	0	0	6	8
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	0	0	1	1
1532	HEPATITIS B ANTIGEN	46	0	0	0	0	0	73	0	0	0	119
1535	HEPATITIS A ANTIBODY	1	0	0	0	0	0	3	0	0	0	4
1536	HEPATITIS C VIRUS	3	0	0	0	0	0	4	0	0	0	7
1541	CHLAMYDIA A - C. TRACHOMATIS	16	0	0	0	0	0	0	0	0	0	16
1556	CMV - CYTOMEGALOVIRUS	9	18	0	1	1	2	6	0	4	1	42
1563	CORONAVIRUS	0	0	0	0	0	1	0	0	0	0	1
1564	ROTAVIRUS	0	0	0	0	0	107	0	0	0	0	107
1565	CALICI VIRUS	0	0	0	0	0	3	0	0	0	0	3
1571	ENTEROVIRUS TYPE 71 (BCR)	0	0	0	0	0	0	0	0	0	1	1
1599	ENTEROVIRUS TYPING PENDING	1	5	0	1	0	8	0	0	0	0	15
9992	ROSS RIVER VIRUS	4	0	0	0	0	0	0	0	0	4	8
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	1	0	0	0	0	0	0	0	0	0	1
TOTAL		119	407	1	5	5	155	90	2	4	281	1069

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2

PERIOD 19/07/90 TO 01/08/90

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	1	0	0	1	0	0	1	1	0	5
0101	ADENOVIRUS TYPE 1	0	0	0	0	0	0	0	1	0	0	1
0102	ADENOVIRUS TYPE 2	0	0	0	0	0	0	1	0	1	0	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	0	0	1	1	0	2
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	0	0	1	0	1
0201	INFLUENZA A VIRUS	0	0	0	0	0	0	1	0	0	0	1
0203	INFLUENZA B VIRUS	0	0	0	0	0	0	2	0	0	0	2
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	0	0	0	0	0	1	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	2	0	0	0	0	0	0	2	1	0	5
0700	ORNITHOSIS-PSITTACOSIS	0	0	0	0	0	0	0	0	1	0	1
0903	COXSACKIEVIRUS B3	0	0	0	0	0	1	0	0	0	1	2
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	0	0	0	0	1	1
1200	MUMPS VIRUS	0	0	0	0	0	0	0	0	1	0	1
1301	HERPES SIMPLEX VIRUS - NOT TYP	1	16	0	0	0	0	0	0	2	0	19
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	15	0	0	0	0	4	9	0	28
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	3	0	3
1306	HERPES SIMPLEX TYPE 1	12	27	0	0	0	0	0	0	3	1	43
1307	HERPES SIMPLEX TYPE 2	0	85	0	0	0	0	0	1	0	0	86
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	0	0	0	1
1401	COXIELLA BURNETII	0	0	0	0	0	0	1	1	0	0	2
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	0	1	1	3	5
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	0	2	0	2
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	0	8	0	8
1541	CHLAMYDIA A - C. TRACHOMATIS	2	110	0	0	0	0	0	0	1	0	113
1556	CMV - CYTOMEGALOVIRUS	0	3	1	1	1	3	1	7	21	3	41
9992	ROSS RIVER VIRUS	0	0	0	0	11	0	0	1	1	0	13
9995	DENGUE	0	0	0	0	0	0	1	0	0	0	1
TOTAL		18	243	16	1	13	4	7	21	58	9	390