ISSN 0725 - 3141

Communicable Diseases Intelligence

Bulletin number 88/1
Issue date: 18 January 1988

Contents:

Editor Dr I.F. Cook
Asst. Editor L. Keo

Q Fever Monitoring Scheme

Eleven cases of Q fever were reported, 1 from Victoria, 4 from New South Wales and 6 from Queensland. Occupational exposure data were only available for one Queensland case, a 25 year old male meatworker from Toowoomba. None of the eleven patients was involved in the Q fever vaccine field trial conducted in South Australia.

VIRUS REPORTING SCHEME: A total of 2,080 reports were processed for the period: 14/12/87 to 10/1/88.

Herpes simplex virus type 2 was isolated from the perineal and vulval swabs of a 24 year old female AIDS patient 10 days after initial treatment with high dose intravenous acyclovir (45mg/kg body weight/day).

Specific IgM antibody to varicella-zoster virus was detected in the serum of a 49 year old male without clinical zoster infection who presented with severe chest pain due to myocarditis.

Specific IgG to rubella was detected in the serum of a 7 month old female with post viral thrombocytopenia.

Cytomegalovirus was isolated from

- the blood and urine of a 10 year old male with a febrile illness following liver transplantation,
- the urine of a 4 year old male oncology patient with pneumonitis following bone marrow transplantation.

Enterovirus untyped, suspected to be coxsackievirus type A or enterovirus type 71, was isolated from the skin lesions of a 2 year old female with hand, foot and mouth disease.

The Bulletin is compiled and distributed by the Public Health Section, Communicable Diseases Branch, Department of Community Services and Health.

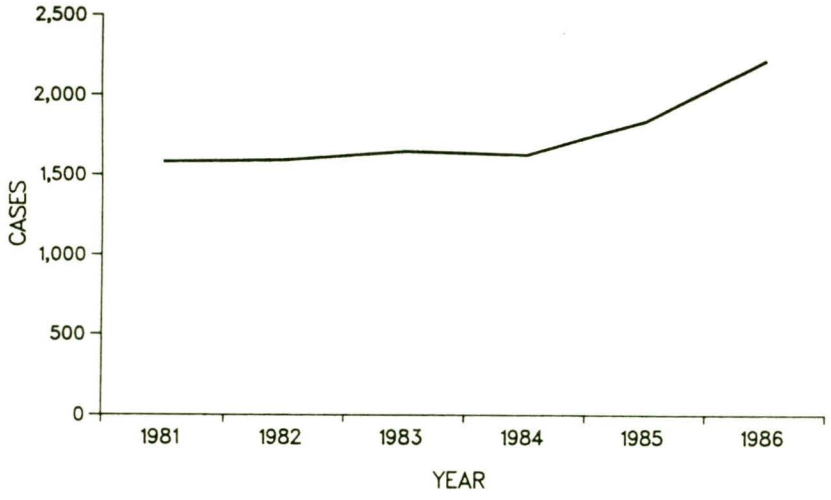
TUBERCULOSIS (TB) AND ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) - NEW YORK CITY (USA)

(Based on MMWR Vol. 36/No. 48, 11 December 1987)

In recent years, reported tuberculosis (TB) cases in New York City have increased substantially, in large part related to co-existing human immunodeficiency virus (HIV) and Mycobacterium tuberculosis infection.

From 1984 to 1986, reported TB cases increased by 36%, or 593 cases (from 1,630 to 2,223 cases) (Figure 1), a numerical increase greater than that for any state or any other city in the United States. By comparison, during the same period, reported cases for the entire nation increased 2%, or 513 (from 22,255 to 22,768).

FIGURE 1: Reported tuberculosis cases, by year - New York City, 1981-1986.



Because the increased TB morbidity in New York City,

- was concurrent with the acquired immunodeficiency syndrome (AIDS) epidemic, and
- was concentrated in the group with 80% of all New York City AIDS patients (males 20-48 years of age),

a special study was conducted to evaluate the hypothesis that "increased TB morbidity might be related to AIDS".

The New York City TB registry for 1979 through 1985 and the New York City AIDS registry from 1981 through 1985 were matched (these time intervals were chosen because AIDS was first recognised nationally in 1981 and because it was noted that the diagnosis of tuberculosis often preceded the diagnosis of AIDS by months or years):

- to determine difference in clinical, demographic, and behavioural characteristics of persons with one or both diseases, by comparing patients with both TB and AIDS (TB/AIDS) with AIDS patients without TB and with TB patients without AIDS;

. only adults and adolescents (persons 13 years of age or older at diagnosis) were compared because no paediatric patients with both diseases were identified.

TB/AIDS patients

The 261 patients common to both registries constituted:

. 2% of the 11,231 adult and adolescent TB patients reported to the New York City TB registry from 1979 through 1985; and
. 5% of the 4,982 adult and adolescent AIDS patients reported to the New York City AIDS registry from 1981 through 1985.

The demographic and epidemiologic details of these 261 patients were:

. SEX: 226 (87%) were male
35 (13%) were female
RACE: 136 (52%) were black
76 (29%) were Hispanic, and
49 (19%) were non-Hispanic white.

. the median age for diagnosis of both TB and AIDS was 34 years.
. the date on which the first M.tuberculosis-positive specimen was taken was available for 258 TB/AIDS patients:

- For these patients, TB had been diagnosed a median of 2 months before AIDS diagnosis (range: 94 months before AIDS diagnosis to 28 months after AIDS diagnosis).
- for 65% of the patients, TB was diagnosed within 6 months before or after AIDS diagnosis.

Adult and Adolescent AIDS patients with and without TB

TB/AIDS patients and AIDS patients without TB were similar in median age at AIDS diagnosis (34 compared with 36 years) and in gender. However, TB/AIDS patients were more likely to be non-Haitian black, Haitian, and Hispanic than AIDS patients without TB (Table 1).

TABLE 1. Adult and adolescent AIDS patients with TB (TB/AIDS) and without TB, by race/ethnicity and AIDS risk factor - New York City, 1981-85.

Characteristics	TB/AIDS (n=261) No.	(%)	AIDS Only (n=4,631) No.	(%)
Race/Ethnicity				
Black, Non-Haitian	107	(41)	1,279	(28)
Haitian	29	(11)	119	(3)
Hispanic	76	(29)	1,077	(23)
White, Non-Hispanic	49	(19)	2,113	(46)
Other/Unknown	0	-	43	(1)
Risk Factor				
IV Drug Abuse	127	(49)	1,303	(28)
Homosexuality/Bisexuality	81	(31)	2,709	(58)
Both of Above	22	(8)	265	(6)
Other	31	(12)	354	(8)

In addition, TB/AIDS patients reported intravenous (IV) drug abuse more frequently and homosexual/bisexual activity alone less frequently than patients with AIDS alone:

. among non-Haitian-black IV drug abusers, the percentage of TB/AIDS patients (10%) was more than twice that among those with a history of homosexual/bisexual behaviour (4%) and those with neither risk factor (4%) (Table 2).

TABLE 2: Intravenous (IV) drug abuse and homosexuality/bisexuality among adult and adolescent AIDS patients* with TB (TB/AIDS) and without TB, by race/ethnicity and AIDS risk factor-New York City, 1981-85.

Race/ Ethnicity	IV Drug Abuse			Homo/Bisexuality			Both Factors			Neither Factor		
	AIDS Cases	TB/AIDS Cases No	(%)	AIDS Cases	TB/AIDS Cases No	(%)	AIDS Cases	TB/AIDS Cases No	(%)	AIDS Cases	TB/AIDS Cases No	(%)
Black, Non-Haitian	669	70	(10)	509	21	(4)	101	12	(12)	107	4	(4)
White, Non-Hispanic	191	9	(5)	1,803	36	(2)	107	4	(4)	61	0	(0)
Hispanic	555	44	(8)	436	23	(5)	74	6	(8)	88	3	(3)
Total	1,415	123	(9)	2,748	80	(3)	282	22	(8)	256	7	(3)

* Excludes 148 Haitian AIDS patients, 29 of whom also had TB, and 43 patients with other or unknown race/ethnicity, none of whom also had TB.

. among non-Hispanic-white IV drug abusers, the percentage of TB/AIDS patients (5%) was more than twice that among both those with a history of homosexual/bisexual behaviour (2%) and those with neither risk factor (0%).
. among Hispanic IV drug abusers, the percentage of TB/AIDS patients (8%) was higher than that among those with a history of homosexual/bisexual behaviour (5%) and more than twice that among those with neither risk factor (3%).

Thus, when the data on AIDS patients was adjusted for race/ethnicity, those AIDS patients who were IV drug abusers were significantly more likely to develop tuberculosis than those who were not (Mantel - Haenszel $\chi^2=18.7$ $p<0.0001$).

Adult and Adolescent TB patients with and without AIDS

TB/AIDS patients were younger (median age at TB diagnosis: 34 years compared with 44 years) and more likely to be male than TB patients without AIDS. In addition, they were more

likely at TB diagnosis to have more than one site of disease, extrapulmonary TB, and a non-reactive tuberculin skin test (Table 3).

TABLE 3: Adult and adolescent TB patients with AIDS (TB/AIDS) and without AIDS, by demographic group and clinical characteristics of TB - New York City, 1979-85.

Characteristics at TB Diagnosis	TB/AIDS (n=261) No.	(%)	TB Only (n=10,970) No.	(%)
Sex				
Male	226	(87)	7,351	(67)
Female	35	(13)	3,619	(33)
Age 20-49 Years				
Yes	244	(93)	6,219	(57)
No	17	(7)	4,751	(43)
Disease Sites				
Multiple*	62	(24)	415	(4)
One, Extrapulmonary	58	(22)	1,741	(16)
One, Pulmonary	141	(54)	8,814	(80)
Tuberculin Skin Test**				
Nonreactive	50	(58)	792	(18)
Reactive	36	(42)	3,686	(82)
Chest X-ray***				
Normal	13	(8)	269	(3)
Abnormal, Noncavitary	131	(80)	5,410	(66)
Abnormal, Cavitary	20	(12)	2,576	(31)

* includes at least one extrapulmonary site.
** includes only patients with known tuberculin skin tests results.
*** includes only those with pulmonary disease and known chest X-ray results.

TB/AIDS patients with a pulmonary site of disease were less likely to have cavitary disease.

MMWR Editorial Note:

The data from this study, as well as other evidence presented below, suggest that human immunodeficiency virus (HIV) infection is causing a resurgence of TB in New York City. Three findings from this study support the hypothesis that AIDS is associated with the observed increase in TB morbidity:

1. The increase in TB cases was concentrated in the sex and age group containing the majority of New York City AIDS patients (males 20-49 years of age).
2. A relatively high proportion of AIDS patients (5%) also had clinically active TB.
3. Among patients with both diseases, TB diagnoses clustered in time around the AIDS diagnoses.

Perhaps the strongest evidence to date for a causal association between TB and HIV infection comes from a study among a cohort of 519 IV drug abusers in New York City who were followed from 1984 through 1986[1]. In this group, 12 of the 279 persons with serologic evidence of HIV infection or clinical AIDS developed TB, where as non of the 240 HIV-negative persons developed TB (p=0.0005, Fischer's exact test).

Other evidence that HIV infection and AIDS may be responsible for the resurgence of TB in New York City, the area with the largest increase in TB in the nation, has also reported more AIDS than any other area in the nation:

- the nearly 600 additional TB cases in 1986 (compared with 1984) exceeds the increase in the entire nation as a whole.
- through 1986, 7891 patients with AIDS, or 27% of the nation's cumulative reported cases (29,121) were New York City residents.

Data also indicate that the greatest increases in TB in New York City occurred in areas of the city with a high incidence of AIDS.

Data suggest that HIV infection in the absence of AIDS is associated with increased TB morbidity (New York City Department of Health, unpublished data). In this study, 58 males who were 25-44 years of age and did not have AIDS but were hospitalised for suspected TB (all 58 patients were later found positive for M. tuberculosis) consented to HIV antibody testing. Thirty one (53%) of them were HIV positive.

Previously published studies have linked TB to AIDS in

- Florida[2,3],
- Newark[4],
- Connecticut[5] and
- San Francisco[6].

Increased TB morbidity has been associated with HIV infection in Dade County, Florida[7]. Of 71 consecutive TB patients seen at the Dade County Public Health Department; 22 (31%) were HIV positive. Two of these 22 patients met the former CDC surveillance criteria for AIDS, ten (45%) of the 22 had extrapulmonary TB and would thus meet the revised CDC surveillance case definition for AIDS[8].

There are two possible mechanisms by which the immunodeficiency caused by HIV infection may increase the risk of tuberculosis:

- HIV-related immunodeficiency could increase susceptibility to new infection and permit that infection to rapidly progress to clinically apparent disease, or
- it may allow a previously latent tuberculosis infection to progress to clinically apparent disease.

Although the clinical and radiographic evidence of tuberculosis in AIDS patients is often similar to the pattern observed in non-immunodeficient patients with primary or recently acquired infection, the clustering of TB diagnosis around the time of the AIDS diagnosis suggests that most tuberculosis in patients with AIDS results from reactivation of a previously acquired

latent infection. The present annual risk of new tuberculosis infection in The United States is too low to account for the high incidence of tuberculosis among AIDS patients. Thus, most tuberculosis in AIDS patients is probably due to the reactivations of latent infections.

The registry match indicates that TB/AIDS patients in New York City are predominantly IV drug abusers:

- 57% of the TB/AIDS patients in this study were IV drug abusers, whereas 34% of AIDS patients without TB had this risk factor.
- the number of reported TB patients in New York City who are IV drug abusers is currently unknown.
- there are an estimated 200,000 IV drug abusers in New York City, 30,000 of whom are enrolled in methadone treatment programs.

These estimates, along with the fact that 12 TB cases developed in a cohort of 519 IV drug abusers, that IV drug abuse is the most common risk factor among TB/AIDS patients, and that New York City had 600 more cases in 1986 than it had in 1984, suggest that many unreported or unidentified TB cases may be occurring annually among HIV-positive IV abusers. Identifying tuberculin-positive IV drug abusers and giving them isoniazid preventive therapy, regardless of their age, may prevent TB among this group.

The registry match also indicates that most TB/AIDS patients in New York City are members of racial and ethnic minorities:

- 81% of the TB/AIDS patients were black (including Haitian) or Hispanic, whereas
- 53% of AIDS patients without TB and 68% of TB patients without AIDS (50% black and 18% Hispanic) belonged to these groups.

Patients with AIDS or HIV infection who also develop TB often have clinical findings (multiple disease sites, extrapulmonary involvement, loss of tuberculin skin reactivity, and among patients with pulmonary disease, noncavitary chest x-rays) that are different[2-8] from those of TB patients without immunodeficiency[2-8], and a high index of suspicion and special diagnostic studies are often needed to establish the diagnosis of TB in these patients[9]. HIV-infected persons who have active TB should be treated in accordance with recently published guidelines[9].

HIV testing of all TB patients should be considered because of the implications of HIV seropositivity for patient management[10]. There is some evidence that:

- TB patients with HIV infection do not respond to standard therapies as well as patients without HIV infection.
- some reports have suggested a higher incidence of adverse drug reactions[6] and a higher treatment-failure rate during therapy[4].

Therefore, a more aggressive approach to treatment of TB in HIV-infected patients has been recommended:

- Treatment should
  - . initially include at least three of the drugs available for treatment of TB,
  - . continue for a minimum of 9 months, and
  - . last for at least 6 months after the patient becomes negative for M.tuberculosis.
- HIV-infected patients with tuberculosis should
  - . receive frequent and careful monitoring for adverse drug effects during therapy, and
  - . be periodically evaluated for signs of relapse after therapy is complete.
- To prevent the transmission of HIV, persons being tested for HIV infection should be counselled in accordance with current recommendations[12].

Increases in TB morbidity may occur in other areas as the prevalence of HIV increases in these areas. Health departments should conduct surveys of the prevalence of HIV infection among TB patients in their jurisdictions. The Centers for Disease Control (CDC, Atlanta) is currently working with health departments in 30 US metropolitan areas to plan and implement such surveys.

REFERENCES

1. IIIrd Intern. Conf. on AIDS, Washington DC, June 1-5, 1987.
2. Ann Intern Med (1984) 101:641-5.
3. MMWR (1986) 35:587-90.
4. JAMA (1986) 256:362-6.
5. MMWR (1987) 36:133-5.
6. Am Rev Respir Dis (1987) 136:570-4.
7. Am Rev Respir Dis (1987) 135:875-9.
8. MMWR (1987) 36 (Suppl 15).
9. MMWR (1986) 35:448-52.
10. MMWR (1987) 36:509-15.
11. Am Rev Respir Dis (1987) 136:492-6.
12. MMWR (1986) 35:152-5.

JAPANESE B ENCEPHALITIS - SRI LANKA

(based on CDR Vol. 87/50 - 18 December 1987)

The World Health Organization (WHO) has reported an outbreak of Japanese B encephalitis in Sri Lanka. Up to the end of November 1987, 254 cases were known to have been admitted to hospital, of whom 65 have died. Although the disease is endemic throughout South East Asia the risk to travellers is extremely low. The last reported case in a UK resident was a 35 year old woman who developed the disease after living in an endemic area for 22 years.

WHO does not recommend vaccination for persons visiting urban areas or for tourists.

CDI Editorial Note:

The Commonwealth Department of Community Services and Health has recently made Japanese encephalitis vaccine available[1] on an Individual Patient Use basis only to Australian travellers

. who will be resident in endemic areas of Asia and the Far East:

- lowlands of Nepal, Bangladesh, India (in particular West Bengal, Uttar Pradesh, Andhra Pradesh, Bihar, Karnataka and Assam)
- Burma, Indonesia, Malaysia, Laos, Philippines, Singapore, Sri Lanka, Thailand, Democratic Kampuchea and Vietnam
- China, Taiwan, Hong Kong, Korea and Japan
- USSR (Eastern Province)

for more than 12 months, or

who visit rural areas during epidemics*.
The disease is currently epidemic in Sri Lanka, Thailand (northern region, Chiang Mai Province in particular during the wet season: May-October) and Vietnam.

NB: It should also be noted that the requesting patient is responsible for the cost of the vaccine which is currently $78.20 for a pack of 5 doses, plus postage and handling.

* Information on epidemics will be published in the CDI as it becomes available.

REFERENCE

1. CDI (1987) 15:20

HUMAN SALMONELLOSIS SURVEILLANCE

(Contributed by J. Taplin, J. Morris and J. Powling, Microbiology Diagnostic Unit (MDU), University of Melbourne)

A total of 1,100 Salmonella (87 serotypes), 150 Shigella and 662 campylobacter isolates from human cases were reported to the National Salmonella Surveillance Scheme during October-December 1986.

Salmonella typhi was isolated from the 13 reported new typhoid cases and included the following serotypes:

. S. typhi E1 was isolated from the blood and the aspirate of a spinal lesion of a 76 year old female.
. S. typhi A was isolated from a 13 year old female returning from India and a 24 year old male.
. S. typhi O was isolated from

- a 26 year old female returning from India, and
- the faeces of a 27 year old female carrier after the birth of her fourth child. The woman had infected two of her children in the past.

. S. typhi C1 was isolated from a 90 year old female.
. S. typhi D2 was isolated from a 6 year old female from Papua New Guinea, the urine of a 53 year old male carrier first identified in 1982 and a 26 year old male reported earlier in the year.
. S. typhi 28 was isolated from

- a 5 year old female and an 18 year old male whose mother had typhoid as a girl in Iran, and
- a 21 year old male (untypable strain also isolated)

. S. typhi degraded was isolated from a 2 year old male who returned from Lebanon (his sister aged one may have been a probable secondary case) and a 20 year old male.
. S. typhi untypable (isolate with H antigen Z_{66}) was isolated from a 44 year old male

Salmonella paratyphi was isolated from 4 new cases of paratyphoid, a probable new carrier and reported isolations from 2 old carriers, and included the following serotypes:

. S. paratyphi A1 was isolated from a 19 year old male refugee from Pakistan and a 55 year old female refugee arriving from Thailand.

. S. paratyphi A4 was isolated from a 22 year old male Pakistani seaman working on a cargo ship.
. S. paratyphi A untypable was isolated from a 2 year old male with no gastrointestinal symptoms.
. S. paratyphi B 3a I var.1 was isolated from a 41 year old female with abdominal pain.

OTHER SALMONELLA INFECTIONS

A. Isolations from blood: 9 cases of septicaemia were reported and involved the following serotypes:

. S. bredeney was isolated from a male infant with febrile convulsions
. S. dublin was isolated from a 70 year old male.
. S. kottbus was isolated from a 72 year old female.
. S. virchow was isolated from a female infant and a one year old male.
. S. heidelberg was isolated from two males aged one and 17 respectively and the urine of a 15 year old female.

B. Isolations from urine: were 15 in total and included the following serotypes:

. S. typhi D2 was isolated from a 53 year old male
. S. paratyphi A1 was isolated from a 72 year old female
. S. heidelberg was isolated from a 15 year old female.

C. Other isolations of interest involved the following serotypes:

. S. braenderup was isolated from the pus of a 25 year old female.

- S. chester was isolated from the sputum of a 70 year old female.
- S. johannesburg was isolated from the bladder swab of a 26 year old female.
- S. typhimurium 12a was isolated from the abscess on the thigh of an 84 year old female.
- S. typhi E1 was isolated from the spinal lesion aspirate of a 76 year old female.
- Sh. sonnei biotype a was isolated from the eye of a one year old female.
- C. jejuni was isolated from the swab of the colostomy site of a 65 year old male.

ENTERIC PATHOGENS ACQUIRED OUTSIDE AUSTRALIA

In addition to the cases of enteric fever detailed above, the following serotypes were acquired overseas.

Salmonella species:

- S. agona, S. anatum,
- S. bareilly, S. blockley, S. bovismorbificans, S. braenderup
- S. cerro, S. chester,
- S. derby,
- S. enteritidis,
- S. hadar, S. haifa, S. hartford, S. havana, S. heidelberg
- S. infantis
- S. java,
- S. krefeld,
- S. lexington, S. litchfield, S. london
- S. mbandaka, S. montevideo, S. muenchen,
- S. newport,
- S. ohio,
- S. panama,
- S. saintpaul, S. senftenberg, S. singapore, S. stanley,
- S. thompson, S. virchow, S. welikade
- S. untypable 9,12:-:1,5, and
- S. typimurium phage types 104, 12a, 26, 54 and RDNC

Shigella species: Shigella infections acquired overseas included:

- Sh. dysenteriae 1 and 4,
- Sh. flexneri types 16, 2a, 4a and 6, variant Y,
- Sh. boydii 18, and
- Sh. sonnei biotypes a and g.

National Salmonella Surveillance Scheme
4th Quarter 1986

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. aberdeen	8				8				
S. abony	7		1		6				
S. adelaide	10			1	4		4		1
S. agona	28	1	6	2	18	1			
S. anatum	16		3	1	2	2	7		1
S. anatum var 15+	8		2	1	4			1	
S. arizonae	5		1		3	1			
S. arizonae 50:k:z35	1					1			

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. ball	2								2
S. bareilly	2		1	1					
S. birkenhead	25		8		15	1	1		
S. blockley	15		5	2	1	2	2		3
S. bovismorbificans	9		3	6					
S. bovismorbificans 13	1		1						
S. bovismorbificans 14	3				3				
S. bovismorbificans 21	2		2						
S. bovismorbificans 23	3						3		
S. bovismorbificans 24	1		1						
S. bovismorbificans 4	1						1		
S. bovismorbificans 8	2					2			
S. braenderup	10		6	2	2				
S. bredeney	11			4	4		2		1
S. broughton	1				1				
S. bukayu	1					1			
S. cerro	27		8	4	6	1	5	3	
S. charity	1				1				
S. chester	33		4	3	10	1	4		11
S. cubana	2				1		1		
S. derby	9		1	5	1	2			
S. dublin	1			1					
S. eastbourne	12	1	1	3	5		1		1
S. emek	2			1			1		
S. enteritidis	18		5	2	10	1			
S. give	6		1		2	1	2		
S. give var 15+	1						1		
S. haardt	1						1		
S. hadar	8		2	2		2	1	1	
S. haifa	2			1			1		
S. hartford	1			1					
S. havana	28		1	3	8	1	9		6
S. heidelberg	26		2	5	18	1			
S. houten subgenus IV	1				1				
S. hvittingfoss	2						2		
S. infantis	19		1	7	4		6		1
S. jangwani	1								1
S. java	3		2				1		
S. java 1 var. 5	1				1				
S. java 1 var. 6	2				1				1
S. java Battersea	4				1		2		1
S. java Dundee	6			4	1	1			
S. java Taunton	2					2			
S. javiana	2		1		1				
S. johannesburg	5			2	3				
S. kinondoni	4								4
S. kottbus	11		3		8				
S. krefeld	3		2			1			
S. lansing	8			1	5		1		1
S. lexington	2			1			1		
S. litchfield	3		1		1				1
S. london	1			1					
S. mbandaka	3			3					
S. mgulani	2				2				
S. mississippi	2					1		1	
S. montevideo	4		2				2		
S. muenchen	31		2	2	7	4	11		5
S. newport	16		3	3		5	5		
S. ohio	3			1	2				

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. ohlstedt	3								3
S. onderstepoort	1								1
S. oranienburg	14		3		1		5		5
S. orientalis	2		1		1				
S. orion	3						1		2
S. oslo	1				1				
S. panama	2	1					1		
S. paratyphi A1	8		1	7					
S. paratyphi A4	1						1		
S. paratyphi A untypable	1			1					
S. paratyphi B 3aI var.1	1			1					
S. poona	1			1					
S. potsdam	8		3		4	1			
S. reading	3		1		2				
S. rubislaw	7				3				4
S. saintpaul	50	1	5	5	13	10	10		6
S. schwarzengrund	3		1			1	1		
S. senftenberg	15		2	1	2		6		4
S. singapore	16	2	10	1	1	1	1		
S. sofia subgenus II	2		1						1
S. stanley	2			1		1			
S. tennessee	12		4		3		4		1
S. thompson	2			1					1
S. typhi*	22	3	11	7	1				
S. typhimurium*	351	4	127	63	39	55	51	3	9
S. untypable -:z24z23:-	1			1					
S. untypable 1,9,1211w:-	1			1					
S. untypable 11:-11,7	1				1				
S. untypable 16:1v:-	1				1				
S. untypable 47:z4,z23:	3			3					
S. untypable 6,7:k:-SG1	1								1
S. untypable 9,12:-:1,5	1			1					

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. urbana	2						2		
S. virchow	44		5	1	32	1	4		1
S. wandsbek subgenus II	1		1						
S. wandsworth	2						1		1
S. warragul	2		2						
S. waycross	4		3		1				
S. welikade	7				2				5
S. weltevreden	5		1						4
S. weltevreden var 15+	1								1
S. zehlendorf	1								1
TOTAL	749	9	137	109	240	50	115	6	83

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. typhi*									
S. typhi 28	3		3						
S. typhi A	4	1		3					
S. typhi C1	1		1						
S. typhi D2	3		3						
S. typhi degraded	3		2		1				
S. typhi E1	3			3					
S. typhi O	2		1	1					
S. typhi untypable	1		1						
S. typhi untypable H=z_{66} Var.	2	2							
TOTAL	22	3	11	7	1				

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. typhimurium*									
S. typhimurium	1					1			
S. typhimurium 1	3		3						
S. typhimurium 101	6		1		2	1	2		
S. typhimurium 102	8						8		
S. typhimurium 104	2						2		
S. typhimurium 108	10		3	4	1		2		
S. typhimurium 116a	2		2						
S. typhimurium 12	2		2						
S. typhimurium 12a	14		9	2	1	1		1	
S. typhimurium 13	1		1						
S. typhimurium 132	1					1			
S. typhimurium 135	51	1	12	20	1	12	2	1	2
S. typhimurium 141	13		1	1	2		8	1	
S. typhimurium 16	1				1				
S. typhimurium 170	41		37	1	2		1		
S. typhimurium 179	6	1	3		1		1		
S. typhimurium 185	3			2		1			
S. typhimurium 186	1					1			
S. typhimurium 20	5						5		
S. typhimurium 202	6			1	5				
S. typhimurium 21	1								1
S. typhimurium 22	6		2		1	1	1		1
S. typhimurium 25	10	1	2	1		4	1		1
S. typhimurium 26	25		18	1	4		2		
S. typhimurium 27	2		1			1			
S. typhimurium 29	4		1		1	1	1		
S. typhimurium 4	10		9			1			
S. typhimurium 41	1					1			
S. typhimurium 43	2		1	1					
S. typhimurium 44	15		6	4	2	3			
S. typhimurium 46	1				1				
S. typhimurium 5	7		2	2		3			
S. typhimurium 54	1			1					
S. typhimurium 55	1						1		

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. typhimurium 58	3			1	1		1		
S. typhimurium 6	6		2	2	2				
S. typhimurium 64	6			1	1	2	2		
S. typhimurium 72	3								3
S. typhimurium 8	4		1			1	2		
S. typhimurium 9	21		1	10		7	3		
S. typhimurium 90	4		1		2	1			
S. typhimurium 91	1				1				
S. typhimurium RDNC	22	1	4	5	6	5	1		
S. typhimurium RDNC +	1						1		
S. typhimurium untypable	17		2	3	1	6	4		1
TOTAL	351	4	127	63	39	55	51	3	9

Erratum

The previous two articles on 'Human Salmonellosis Surveillance' published on pages 5-15 of CDI 87/25 referred to the report of the 2nd and 3rd quarters of 1986 and not 1987 as stated in the articles or 1988 as listed in the Table of Contents on the front page. Readers should amend their copies of CDI 87/25 to maintain the chronological order of subsequent salmonella reports.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

TOTAL VIRAL ISOLATIONS BASED ON DATE OF COLLECTION
PERIOD - FORTNIGHTLY
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

Period 14/12/87 to 10/1/88

1. CODE 019 - FAIRFIELD(VIC)
2. CODE 065 - STATE LAB(WA)
3. CODE 110 - IMVS(SA)
4. CODE 111 - RCH(VIC)
5. CODE 112 - ICPMR(NSW) WVH(ACT)
6. CODE 113 - PHH POW(NSW)
7. CODE 114 - RAHC(NSW)
8. CODE 115 - STATE LAB(QLD)

		019	065	110	111	112	113	114	115	TOTAL
0100	ADENOVIRUS NOT TYPED	2	10	1	3	0	3	2	18	39
0101	ADENOVIRUS TYPE 1	3	2	4	3	3	0	0	0	15
0102	ADENOVIRUS TYPE 2	1	4	2	1	7	0	0	0	15
0103	ADENOVIRUS TYPE 3	1	3	3	0	2	0	0	0	9
0105	ADENOVIRUS TYPE 5	0	3	0	2	0	0	0	0	5
0106	ADENOVIRUS TYPE 6	0	0	1	0	0	0	0	0	1
0107	ADENOVIRUS TYPE 7	0	0	1	0	0	0	0	0	1
0108	ADENOVIRUS TYPE 8	1	2	0	0	0	0	0	0	3
0199	ADENOVIRUS TYPING PENDING	0	0	1	7	0	0	1	0	9
0201	INFLUENZA A VIRUS	1	0	6	0	0	1	0	4	12
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	0	2	1	0	0	0	0	3
0203	INFLUENZA B VIRUS	0	0	5	0	0	6	0	0	11
0301	PARAINFLUENZA VIRUS TYPE 1	0	1	1	0	0	0	0	0	2
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	1	0	0	0	0	1	2
0303	PARAINFLUENZA VIRUS TYPE 3	3	0	4	5	6	0	2	9	29
0400	RESPIRATORY SYNCYTIAL VIRUS	2	5	6	3	3	2	0	2	23
0500	RHINOVIRUS (ALL TYPES)	9	5	2	6	2	1	0	13	38
0600	MYCOPLASMA PNEUMONIAE	4	18	17	6	3	6	4	11	69
0700	ORNITHOSIS-PSITTACOSIS	2	0	1	0	1	0	0	0	4
0809	COXSACKIEVIRUS A9	2	0	0	1	0	0	0	0	3
0810	COXSACKIEVIRUS A10	3	0	0	0	0	0	0	0	3
0816	COXSACKIEVIRUS A16	5	0	0	0	2	0	0	0	7
0902	COXSACKIEVIRUS B2	5	1	2	0	0	0	1	0	9
0903	COXSACKIEVIRUS B3	0	1	0	0	0	0	0	0	1
0905	COXSACKIEVIRUS B5	6	0	0	3	0	0	0	0	9
0906	COXSACKIEVIRUS B6	1	0	0	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	2	0	0	0	0	0	0	0	2
1018	ECHOVIRUS TYPE 18	0	4	0	0	0	0	0	0	4
1022	ECHOVIRUS TYPE 22	1	0	2	0	1	0	0	0	4
1025	ECHOVIRUS TYPE 25	0	0	0	0	1	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	2	0	3	0	0	5
1101	POLIOVIRUS TYPE 1	1	1	0	0	2	0	1	0	5
1102	POLIOVIRUS TYPE 2	1	0	2	0	2	0	0	0	5
1103	POLIOVIRUS TYPE 3	1	0	1	0	0	0	0	0	2
1200	MUMPS VIRUS	0	1	0	1	5	0	0	0	7
1300	HERPES VIRUS GROUP - NOT TYPED	2	6	1	0	35	0	0	0	44
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	7	0	0	0	0	3	0	10
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	11	9	0	16	0	2	14	52
1303	VARICELLA-ZOSTER VIRUS	4	9	1	0	5	0	0	3	22
1306	HERPES SIMPLEX TYPE 1	93	50	32	0	51	21	0	91	338
1307	HERPES SIMPLEX TYPE 2	111	82	40	0	162	35	0	138	568
1399	HERPES VIRUS TYPING PENDING	0	0	0	7	0	0	0	0	7
1401	COXIELLA BURNETI	1	0	0	0	4	0	0	6	11
1502	PICORNIA VIRUS - NOT TYPED	0	1	0	0	0	8	0	27	36
1514	MOLLUSCUM CONTAGIOSUM	0	1	0	0	0	0	0	0	1
1521	MEASLES VIRUS	0	0	0	2	1	0	0	0	3
1522	RUBELLA VIRUS	3	1	5	4	1	2	0	6	22
1532	HEPATITIS B ANTIGEN	35	33	12	0	0	7	0	36	123
1535	HEPATITIS A ANTIBODY	6	6	11	2	2	0	0	1	28
1541	CHLAMYDIA A - C. TRACHOMATIS	18	119	46	0	28	1	1	44	257
1556	CMV - CYTOMEGALOVIRUS	47	15	7	1	12	8	2	21	113
1564	ROTAVIRUS	3	10	19	4	3	3	5	0	47
1565	CALICI VIRUS	0	0	0	0	1	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	0	0	17	0	12	1	0	30
9992	ROSS RIVER VIRUS	0	1	0	0	0	0	0	7	8
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	0	1	0	1
TOTAL		380	413 *	248	81	361	119	26	452	2080

* Princess Margaret Hospital for Children - 24 isolates

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

Period 14/12/87 to 10/1/88

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 TRA CT
11. CODE 06 ... - SKIN MUCOUS

		1	2	3	4	6	7	8	9	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	0	15	0	0	1	16	0	0	0	0	32
0101	ADENOVIRUS TYPE 1	0	10	0	0	0	3	0	0	0	0	13
0102	ADENOVIRUS TYPE 2	0	8	0	0	0	4	0	0	0	0	12
0103	ADENOVIRUS TYPE 3	0	2	0	0	1	1	0	0	0	1	5
0105	ADENOVIRUS TYPE 5	0	3	0	0	0	1	0	0	0	0	4
0106	ADENOVIRUS TYPE 6	1	0	0	0	0	0	0	0	0	0	1
0107	ADENOVIRUS TYPE 7	0	1	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	6	1	0	0	1	0	0	0	0	9
0201	INFLUENZA A VIRUS	0	8	0	0	0	0	0	1	0	0	9
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	3	0	0	0	0	0	0	0	0	3
0203	INFLUENZA B VIRUS	1	7	0	0	0	0	0	0	0	0	8
0301	PARAINFLUENZA VIRUS TYPE 1	0	1	0	0	0	0	0	0	0	0	1
0302	PARAINFLUENZA VIRUS TYPE 2	1	1	0	0	0	0	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	2	25	0	0	0	0	0	0	0	0	27
0400	RESPIRATORY SYNCYTIAL VIRUS	0	23	0	0	0	0	0	0	0	0	23
0500	RHINOVIRUS (ALL TYPES)	0	35	0	0	0	0	0	0	0	0	35
0600	MYCOPLASMA PNEUMONIAE	10	47	0	0	0	0	0	0	0	1	58
0700	ORNITHOSIS-PSITTACOSIS	0	4	0	0	0	0	0	0	0	0	4
0809	COXSACKIEVIRUS A9	0	1	0	2	0	0	0	0	0	0	3
0810	COXSACKIEVIRUS A10	0	0	0	0	0	0	0	0	0	2	2
0816	COXSACKIEVIRUS A16	1	0	0	0	0	0	0	0	0	6	7
0902	COXSACKIEVIRUS B2	0	1	0	3	1	0	0	0	0	0	5
0903	COXSACKIEVIRUS B3	0	0	0	0	0	1	0	0	0	0	1
0905	COXSACKIEVIRUS B5	0	2	0	4	0	0	0	0	0	0	6
0906	COXSACKIEVIRUS B6	0	0	0	1	0	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	0	0	0	0	1	1
1018	ECHOVIRUS TYPE 18	0	1	0	0	0	1	0	0	0	0	2
1022	ECHOVIRUS TYPE 22	0	1	0	0	0	0	0	0	0	0	1
1025	ECHOVIRUS TYPE 25	0	0	0	1	0	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	2	0	0	0	3	0	0	0	0	5
1101	POLIOVIRUS TYPE 1	1	0	0	0	0	3	0	0	0	0	4
1102	POLIOVIRUS TYPE 2	1	1	0	0	0	3	0	0	0	0	5
1103	POLIOVIRUS TYPE 3	1	1	0	0	0	0	0	0	0	0	2
1200	MUMPS VIRUS	1	1	0	0	0	0	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	5	0	0	0	0	0	0	0	0	30	35
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	0	0	0	1	0	0	0	0	9	10
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	7	4	0	0	0	0	4	0	0	0	15
1303	VARICELLA-ZOSTER VIRUS	1	1	0	0	0	0	0	0	0	16	18
1306	HERPES SIMPLEX TYPE 1	13	13	1	0	0	0	0	0	0	195	222
1307	HERPES SIMPLEX TYPE 2	25	0	0	0	0	0	0	0	0	164	189
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	0	0	5	6
1401	COXIELLA BURNETI	4	0	0	0	0	0	0	0	0	0	4
1502	PICORNIA VIRUS - NOT TYPED	0	4	0	0	1	16	0	0	1	12	34
1514	MOLLUSCUM CONTAGIOSUM	0	0	0	0	0	0	0	0	0	1	1
1521	MEASLES VIRUS	0	0	0	0	0	0	0	0	0	2	2
1522	RUBELLA VIRUS	1	1	0	0	0	0	0	0	0	15	17
1532	HEPATITIS B ANTIGEN	17	0	0	0	0	0	97	1	0	2	117
1535	HEPATITIS A ANTIBODY	2	0	0	0	0	0	21	0	0	0	23
1541	CHLAMYDIA A - C. TRACHOMATIS	16	1	0	0	0	0	0	0	0	0	17
1556	CMV - CYTOMEGALOVIRUS	8	24	1	0	0	0	1	0	11	1	46
1564	ROTAVIRUS	0	1	0	0	0	46	0	0	0	0	47
1565	CALICI VIRUS	0	0	0	0	0	1	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	2	9	1	1	0	11	0	0	0	4	28
9992	ROSS RIVER VIRUS	1	0	0	0	0	0	0	0	0	1	2
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	1	0	0	0	0	1
TOTAL		123	269	4	12	5	112	123	2	12	468	1130

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

Period 14/12/87 to 10/1/88

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

		12	13	14	15	16	17	18	19	20	21	TOTAL
0100	ADENOVIRUS NOT TYPED	2	0	0	0	0	0	2	2	1	0	7
0101	ADENOVIRUS TYPE 1	1	0	0	0	0	0	0	1	0	0	2
0102	ADENOVIRUS TYPE 2	0	0	0	0	0	0	1	1	0	1	3
0103	ADENOVIRUS TYPE 3	4	0	0	0	0	0	0	0	0	0	4
0105	ADENOVIRUS TYPE 5	0	0	0	0	0	0	1	0	0	0	1
0108	ADENOVIRUS TYPE 8	3	0	0	0	0	0	0	0	0	0	3
0201	INFLUENZA A VIRUS	0	0	0	1	0	0	0	2	0	0	3
0203	INFLUENZA B VIRUS	0	0	0	0	1	0	0	1	1	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	0	0	0	0	0	1	0	0	1
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	0	1	1	0	0	2
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	1	2	0	0	3
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	6	5	0	11
0810	COXSACKIEVIRUS A10	0	0	0	0	0	0	0	1	0	0	1
0902	COXSACKIEVIRUS B2	0	0	0	0	0	0	1	2	1	0	4
0905	COXSACKIEVIRUS B5	0	0	0	0	0	0	0	2	0	1	3
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	0	0	1	0	0	1
1018	ECHOVIRUS TYPE 18	0	0	0	0	0	0	1	0	0	1	2
1022	ECHOVIRUS TYPE 22	0	0	1	0	0	1	0	0	0	1	3
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	0	0	0	1	0	1
1200	MUMPS VIRUS	0	0	3	0	0	0	1	0	1	0	5
1300	HERPES VIRUS GROUP - NOT TYPED	3	6	0	0	0	0	0	0	0	0	9
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	15	5	1	0	0	10	6	0	37
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	2	2	0	4
1306	HERPES SIMPLEX TYPE 1	12	95	0	0	0	0	0	4	5	0	116
1307	HERPES SIMPLEX TYPE 2	1	377	1	0	0	0	0	0	0	0	379
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	0	1	1
1401	COXIELLA BURNETI	0	0	0	0	0	0	0	6	1	0	7
1502	PICORNIA VIRUS - NOT TYPED	0	2	0	0	0	0	0	0	0	0	2
1521	MEASLES VIRUS	0	0	0	0	1	0	0	0	0	0	1
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	4	1	0	5
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	2	4	0	6
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	0	5	0	5
1541	CHLAMYDIA A - C. TRACHOMATIS	3	237	0	0	0	0	0	0	0	0	240
1556	CMV - CYTOMEGALOVIRUS	2	5	0	1	0	9	2	9	39	0	67
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	1	0	1	2
9992	ROSS RIVER VIRUS	0	0	0	0	4	0	0	1	1	0	6
TOTAL		31	722	20	7	7	10	11	62	74	6	950

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 5 - 19 April 1987 to 16 May 1987. Bulletin..88/1.....

Disease	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	Cumulative Total to Date for Year
Amoebiasis	1	1		1				1	4	25
Ankylostomiasis				3	3		NN		6	18
Anthrax									-	1
Arbovirus infection	14		128		7				149	511
Brucellosis								1	1	8
Campylobacter infections	113		NN	68	15	NN	13	1	210	1 209
Chancroid				NN					-	4
Cholera									-	1
Congenital rubella syndrome			NN			NN		NN	-	-
Diphtheria							5		5	14
Donovanosis				NN	5		3		8	40
Giardiasis	31		NN	59	21	NN	NN	NN	111	595
Genital herpes	50		4	16	NN	NN	1	1	72	* 866
Gonococcal ophthalmia neonatorum		NN			NN	NN	151	NN	151	154
Gonorrhoea	66		37	46	83	8	80	5	325	* 2 414
Hepatitis A (infectious)	7	6	7	10	18	1	4	1	54	264
Hepatitis B (serum)	25	36	51	5	49	8	1		175	707
Hepatitis – unspecified	2		1	1	NN	NN			4	70
Hydatid disease	1								1	3
Lassa fever			NN			NN		NN	-	-
Legionnaires disease	40	2	NN		3	NN		NN	45	51
Leprosy	3				3				6	11
Leptospirosis	1		3						4	62
Lymphogranuloma venereum				NN	NN	NN		NN	-	-
Marburg disease			NN			NN		NN	-	-
Malaria	5	8	25	4	1	1	1	1	46	* 266
Meningococcal infections	1	2				NN			3	22

Disease	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	Cumulative Total to Date for Year
Non-specific urethritis	211		2	55	NN	NN	NN	NN	268	* 2 657
Ornithosis						2			2	* 5
Pertussis (whooping cough)	1	1	NN	1	12	NN		NN	15	183
Plague									-	-
Poliomyelitis									-	-
Q. fever	12		11						23	158
Rabies				NN		NN		NN	-	-
Salmonella infections	65	15	58	39	50	14	21	2	264	* 1 309
Shigella infections	17	2	12	7	8		23		69	* 270
Smallpox									-	-
Syphilis	53		17	2	14		63	2	151	* 800
Tetanus										3
Trachoma		NN			56	NN	NN		56	77
Tuberculosis (all forms)	33	13	18	4	12		1	NN	81	383
Typhoid fever	4	1			1				6	28
Typhus (all forms)			1			1			2	2
Vibrio parahaemolyticus infections	1		NN			NN		NN	1	2
Yellow fever										
Yersinia infections	14		NN	1		NN		NN	15	48

NN - Not Notifiable

(Note: Data collected under the Notifiable Diseases Returns may bear little or no correlation to that collected under the CDI laboratory scheme. Whilst the latter is a sampling program, the Notifiable Diseases data is dependent upon voluntary reporting by medical practitioners etc.)

* ADJUSTMENT TO THE CUMULATIVE TOTAL SINCE LAST REPORT

Genital herpes	+128	Victoria)	For the period January to March 1987
Gonorrhoea	+200	Victoria)	
N.S.U.	+1125	Victoria)	
Syphilis	+28	Victoria)	
Malaria	+1	South Australia	
Ornithosis	+1	South Australia	
Salmonella inf.	+1	South Australia	
Shigella inf.	-1	South Australia	