AUSTRALIA Communicable Diseases Intelligence

Bulletin Number 79/22
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Virus reports this period - 958. Reports of interest include:

- Echovirus type 11 - 26 reports, 13 from meningitis/encephalitis patients. Nine of the 13 were from Victoria and two from South Australia. This indicates a continuation of the outbreak mentioned in CDI 79/21. One isolation of this organism was reported from a patient diagnosed as "Bornholm's" disease, which is normally associated with Coxsackie B viruses.

- Rotavirus - the large number of reports received this period - 202 - is due to the incorporation by the ICPMR of approximately 165 isolations from a retrospective survey on children with gastroenteritis in the Royal Alexandra Hospital for Children, Sydney, between June and September this year.

- Cytomegalovirus - two of the 48 reported isolations were from one month old premature twins who had each received an exchange blood transfusion from the same donor, given within 24 hours of collection. There is evidence that infants can be infected with cytomegalovirus by means of fresh blood transfusions. As very pre-term infants are likely to receive such transfusions, they are at particular risk.

  Ballard and co-workers (Am J Dis Child; 1979, 133, 482-485) recently reported isolation of the virus from 16 of 51 infants in an intensive care nursery. They had all received multiple transfusions. Milk or congenitally acquired infection did not appear to be contributory factors in this study.

  They also found that 14 of the 16 virus positive infants had remarkably similar symptoms: an unusual grey pallor, hepatosplenomegaly, atypical lymphocytosis, and a disturbing septic appearance associated with a deterioration of respiratory function. Three of the infants, who had had particularly severe underlying pulmonary disease, died.

  Studies undertaken at Fairfield Hospital, where investigations on the above twins were carried out, have found an overall incidence of cytomegalovirus infection in 14% of transfused pre-term babies, rising to 25% in those whose blood came from "walk-in" donors.

  In an editorial on this subject in the journal quoted above, the possibility of screening both recipients and donors prior to transfusion was raised.

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"NO SMALLPOX" (based on Weekly Epidemiological Record 1979, 54, 329-330)

As on 26 October 1979, two years have elapsed since the world's last known case of endemic smallpox.

The basic criterion for confirming the eradication of smallpox is that two years must have elapsed without a case of smallpox being detected by a system of surveillance sufficiently sensitive to have detected a case had it occurred. This criterion has now been met. The evidence will be subjected to critical review by a panel of experts, the Global Commission for the Certification of Smallpox Eradication. Their report will be the basis of a presentation to the World Health Assembly in May 1980. The endorsement of eradication will signify formal recognition that routine smallpox vaccination and vaccination certificates are unnecessary. The risk of complications from vaccination is obviously greater than the risk of getting smallpox which is now zero.

Nevertheless, as at 24 October 1979, 35 countries still required current smallpox vaccination certificates from all arrivals. Those most likely to concern Australian travellers include Brunei, East Timor, Kampuchea, Laos and the Philippines. China requires smallpox vaccination for arrivals from some countries, but Australia is not one of them.

WHO records that an increasing number of health administrations are receiving complaints from doctors who are concerned about the possibility of adverse reactions resulting from unnecessary vaccination in relation to international travel. One of the problems is that, although a Member State may no longer require a smallpox vaccination certificate, the embassies and/or consulates of these countries abroad are still insisting that a certificate is required and in some instances refuse to issue visas without them. WHO is asking all health administrations to ensure that the vaccination certificate requirements of their embassies and consulates abroad reflect the views of the national health administration. It is emphasized that no smallpox vaccination certificate should be required from any traveller.

In Australia, the National Health and Medical Research Council reviewed its recommendation on smallpox vaccination on 26 October 1979, and considered that although the disease had been declared eradicated, personnel likely to be exposed to smallpox vaccine or vaccinia or other orthopox viruses, for example in diagnostic and research laboratories, should maintain their vaccination status in view of the possibility of accidental inoculation.

Erratum - CDI 79/21

Page 1. In the comment on Adenovirus type 19 isolations it was stated that this organism is normally associated with respiratory tract infections and conjunctivitis. Of 135 isolations over the past two years there have been two reports of isolations from the nose and one from the skin. All the others have been either from the eyes or genital sources.

Human toxoplasmosis - a review (prepared, at the request of the Editor, by J.M. Goldsmid, Reader in Medical Microbiology, University of Tasmania, Hobart, Tas. 7000, and B.L. Munday, Chief Veterinary Pathologist, Mt. Pleasant Laboratories, Department of Agriculture, Launceston, Tasmania 7250)

Although the protozoan Toxoplasma gondii has been recognised for over 70 years, its systematic position as a coccidian and its biology have only been elucidated in the last decade. Further, although it has been known for 30 years that this parasite can infect man, much confusion still exists regarding human toxoplasmosis.

Research work in Europe and the U.S.A. finally established that T. gondii was not only an intestinal parasite of felids (enteric phase) but that it also could have an exoenteric phase in the tissues of a wide variety of warm-blooded animal species including man.[1,2]

Man may acquire the infection in a number of ways:

(a) by ingestion of coccideal oocysts passed in cat faeces via soil, cat boxes, contaminated plants, etc.

(b) by ingestion of tissue cysts in mutton, pork, goat and to a lesser extent beef[1-4] which is eaten raw or undercooked. Although toxoplasma has been shown to infect pigeons and fowls,[5] their role in human infections has not been defined.

(c) transplacentally when a woman becomes infected while pregnant.

Human infection with toxoplasma is world-wide, with prevalence rates from serological studies running as high as 75%-100% in some countries.[6-8] In Australia, the prevalence of toxoplasmosis is estimated at about 20-30%.[9-12]

Acquired infections are nearly always asymptomatic and even when symptomatic, symptoms are usually mild. It is only rarely that toxoplasmosis, acquired after birth, is serious - although the disease can be acute or even fatal i.e. while toxo-infection is common, toxo-disease is uncommon and severe toxo-disease is rare.[6,13]

When infection with T. gondii is symptomatic, the disease presents in most cases as a glandular fever-like disease with malaise, pyrexia, sore throat, localized or generalized lymphadenopathy and atypical monocytes, but it may rarely present as a typhus-like disease, a hepatitis, an encephalitis or a myocarditis.[14-17]

Toxoplasmosis is becoming increasingly recognised as an opportunist, with serious infection arising endogenously or exogenously (e.g. by blood transfusion[18]) in the immunologically incompetent or immunosuppressed.[1,15]

However, it is the transplacental form of the disease which causes most concern, whereby a mother who becomes infected while pregnant can, even though she herself may remain asymptomatic, pass the infection on to her unborn child. In general terms, the earlier in pregnancy that the mother

becomes infected, the lower the incidence of infection in the foetus but the more severe the effects on the child, and intrauterine death and abortion may result. The disease in the child can present in two forms - a generalized form in which the child has an erythroblastosis-like syndrome with rash, hepatosplenomegaly, jaundice, etc., or a CNS form in which the child may develop intracerebral calcifications, hydrocephaly or microcephaly, chorioretinitis, psychomotor disturbances and convulsions, microphthalmia, etc. The effects on the child may be delayed and only show days, weeks, months or even years after birth and the child may be left with residual brain damage and mental retardation.[1,6,15,19-21]

It is worth noting here that, contrary to popular belief, abortion is seldom associated with chronic toxoplasmosis and recurrent abortion, although it has been occasionally reported,[22] is not a feature of toxoplasmosis.[15,23,24] In nearly all cases, the parasite will pass to the foetus only if the previously uninfected mother becomes infected while pregnant and all subsequent pregnancies will almost certainly be normal.[5,24] It is also worthy of note that the incidence of clinically detectable abnormalities in babies of mothers known to have acquired toxoplasmosis during pregnancy is 11-13%.[26] The results of many studies are similar to those obtained by Munday, who concluded that congenital toxoplasmosis was not an important cause of perinatal morbidity in Tasmania.[27] The incidence of perinatally acquired toxoplasmosis in the U.K. varies from 1 in 4000 to about 1 in 30,000 pregnancies[28], while in Western Australia the figure is put at about 1 in 8,000 live births.[11] However, the incidence is higher in other parts of the world (e.g. Paris, Bordeaux and Austria)[29] and in the U.S.A., it is estimated that at least 3000 congenitally infected infants are born yearly.[15] Thus one must not dismiss the infection too lightly.

As regards diagnosis of toxoplasmosis in man, isolation of the parasite is not usually very rewarding. Although it has been isolated from blood, bone marrow, CSF and lymph node biopsy in clinical cases, this procedure is mostly impractical.[30] In most cases, the diagnosis must be made serologically and here much confusion exists regarding the use and interpretation of such serological tests as the latex agglutination test (LAT); the complement fixation test (CFT); the indirect fluorescent antibody test (IFAT); the indirect haemagglutination test (IHAT) and the classic Sabin-Feldman methylene blue dye test (SFDT).

Bearing in mind the widespread occurrence of toxo-infection and the diverse nature of the clinical signs and symptoms of toxo-disease, it is no wonder that cynical comments such as "it is often difficult not to make a diagnosis of toxoplasmosis" and "toxoplasmosis is often the refuge of the diagnostically destitute" have been made! It is thus strongly recommended that clinicians and referral laboratories consult closely with the specialist testing laboratory on interpretation of test results.

In general terms, titres in the IFAT, the IHAT and the SFDT rise rapidly in acquired toxoplasmosis and these tests remain positive for

years, if not for life. The CFT (using soluble antigen) tends to rise more slowly, achieve lower titres and return to negative in 6-12 months (rarely 2-3 years)[6,9,32-36]

It is less easy to define the exact role of latex agglutination tests, but some laboratories use them as a screening test to determine whether further serological tests should be done.[6,37,38]

Of all these tests, the SFDT is not as readily available as the IFAT and the IHAT (which tend to be the most widely used of the serological tests for toxoplasmosis[39]) because it uses live toxoplasma as antigen.

The differentiation of active clinical toxoplasmosis from old infections can best be achieved by the demonstration of a rising titre on paired sera - although titres may already be maximal by the time the clinical diagnosis is considered. Alternatively, although perhaps not ideally, recentness of infection can be assumed by:

(a) A single very high titre - the significance of which will depend upon the test used, the population "background noise", the laboratory in which the test is performed and individual patient variation.

(b) The demonstration of specific IgM as opposed to IgG - especially in cases of suspected transplacental toxoplasmosis in neonates.

(c) The use of the CFT alone or, better, in combination with the IFAT, the IHAT or the SFDT.

Having established the diagnosis, it is necessary to reiterate that most people infected with toxoplasmosis will not require treatment and the unsatisfactory range of therapeutic agents available make it undesirable to treat all infected patients as a matter of course. However, if the patient's clinical condition warrants treatment then the available therapeutic drugs include:[15,20,40-42]

(a) Pyrimethamine and sulphadiazine. (Note comments later.)

(b) Co-trimoxazole.[44]

(c) Levamisole - although caution on the use of this drug as an immunostimulant in cancer patients has recently been expressed.[46]

Although clindamycin has been postulated to be effective for toxoplasmosis in mice and humans,[47] its apparent association with pseudomembranous colitis makes it best reserved only for "serious or life-threatening conditions" - most cases of toxoplasmosis certainly not falling into this category.[48]

A problem which has caused much controversy is whether a pregnant woman, with demonstrated recently acquired toxoplasmosis should be treated. Here the decision revolves around the possible effect on the foetus of the infection versus the possible effects on the mother and the possible teratogenic effects on the foetus of the chosen chemotherapeutic agent.

Thus Co-trimoxazole, although there is no evidence of teratogenicity, is not recommended during pregnancy[49] and pyrimethamine is possibly teratogenic[14,43] and can certainly result in thrombocytopenia, leucopenia and a megaloblastic anaemia.[6,14,19,40,43] It is for this reason that European workers have preferred the use of spiramycin and sulphadiazine in pregnant women.[6,15,29,42,43]

However, Beverley[20] felt strongly that where acquired toxoplasmosis could be conclusively demonstrated to have occurred during pregnancy, treatment was both justified and protective for the foetus. Scott,[1] while quoting work to support this view, also gave good evidence to suggest that treatment of the mother was of doubtful value in the protection of the child and quoted studies which showed that the cost of surveillance of pregnant women was prohibitive. Menser,[50] although conceding that the problem of transplacental toxoplasmosis in Australia might be significant (she estimated it at between 4 and 7 per 1000 pregnancies), rather sidestepped making any definite recommendation, remarking that "the decision to treat an established infection during pregnancy has to be weighed against the potential toxicity of the drugs which are required in high doses for several weeks".

In a recent review, Krick and Remington[15] concluded:

"Treatment of toxoplasmosis acquired at any time during pregnancy decreases (but does not eliminate) the chance of a congenitally infected infant". They further felt that pyrimethamine should certainly not be used in the first trimester "if induced abortion is decided against".

The choice therefore appears to be between using sulphadiazine alone or in combination with spiramycin.

(References - The list of 50 references is not reproduced here due to space restrictions, but can be obtained from the authors on request.)

Campylobacter isolations

Further reports of the isolation of *Campylobacter spp* have been received from the Microbiology Department of the Ballarat and District Base Hospital, and the Woden Valley Hospital in Canberra.

Ballarat reports four isolations since August this year in patients varying in age from 2½ to 69 years. One had recently returned from Indonesia and another had symptoms of bowel obstruction.

The organisms were isolated in a B.B.L. anaerobic jar containing an Oxoid Gas Kit Envelope and no catalyst. Incubation was at 37°C for 48 hours for three cases, and 24 hours at 43°C for the last.

The Woden Valley Hospital reported six isolations during October, three being from children aged between 3 and 8 years.

Editorial note - When the NH & MRC added "Campylobacter infections" to its list of "notifiable" diseases, "Yersinia" infections were included also. CDI would be pleased to receive reports of isolations of *Yersinia spp* from human sources.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 18-10 - 79 . 31-10-79 BULLETIN NUMBER 79.22

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW) / WVH (ACT)	RAHC (NSW)	PBH/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
0100 ADENOVIRUS NOT TYPED	12		2	1	3	1	8	3	30
0101 ADENOVIRUS TYPE 1				1	2			1	4
0102 ADENOVIRUS TYPE 2				1	4				5
0103 ADENOVIRUS TYPE 3								1	1
0104 ADENOVIRUS TYPE 4						4			4
0105 ADENOVIRUS TYPE 5				2		2		1	5
0106 ADENOVIRUS TYPE 6						1			1
0107 ADENOVIRUS TYPE 7			2	4	1				7
0109 ADENOVIRUS TYPE 9	1								1
0111 ADENOVIRUS TYPE 11	1								1
0119 ADENOVIRUS TYPE 19				5		1		4	10
0129 ADENOVIRUS TYPE 29						1			1
0199 ADENOVIRUS TYPING PENDING					8	4			12
0201 INFLUENZA A VIRUS		1	2		2			3	8
0203 INFLUENZA B VIRUS							4	7	11
0301 PARAINFLUENZA VIRUS TYPE 1						1			1
0302 PARAINFLUENZA VIRUS TYPE 2				1			1		2
0303 PARAINFLUENZA VIRUS TYPE 3					10	2	1	4	17
0399 PARAINFLUENZA VIRUS TYPING PENDING						1			1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	1			2	2	18	4	1	28
0500 RHINOVIRUS (ALL TYPES)				2	11	2	4		19
0600 MYCOPLASMA PNEUMONIAE	4		1	1		4	2	8	20
0700 ORNITHOSIS-PSITTACOSIS	5			2		2			9
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED								1	1
0803 COXSACKIEVIRUS A3					1				1
0809 COXSACKIEVIRUS A9	1								1
0902 COXSACKIEVIRUS B2							2		2
0903 COXSACKIEVIRUS B3				1		4	1		6
0904 COXSACKIEVIRUS B4	2			3		2	1	4	12
1000 ECHOVIRUS NOT TYPED							4		4
1004 ECHOVIRUS TYPE 4	1								1

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 2

REPORTING PERIOD - 18-10-79 . 31-10-79 BULLETIN NUMBER 79.22

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

	VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1006	ECHOVIRUS TYPE 6						2			2
1011	ECHOVIRUS TYPE 11	1	1		13	3	7		1	26
1017	ECHOVIRUS TYPE 17	1								1
1018	ECHOVIRUS TYPE 18	1								1
1022	ECHOVIRUS TYPE 22						1			1
1023	ECHOVIRUS TYPE 23			1						1
1025	ECHOVIRUS TYPE 25	2								2
1030	ECHOVIRUS TYPE 30	1			1		1	2		5
1101	POLIOVIRUS TYPE 1								2	2
1102	POLIOVIRUS TYPE 2						1			1
1103	POLIOVIRUS TYPE 3	2								2
1104	POLIOVIRUS-VACCINAL STRAIN			1						1
1200	MUMPS VIRUS	12	4	3	8	1		1	1	30
1300	HERPES VIRUS GROUP-NOT TYPED				2					2
1301	HERPES SIMPLEX VIRUS-NOT TYPED	11		1	4	5	1	17	29	68
1302	EPSTEIN-BARR VIRUS (EB VIRUS)								3	3
1303	VARICELLA-ZOSTER VIRUS	2					1			3
1306	HERPES SIMPLEX TYPE 1	6		5	20		12			43
1307	HERPES SIMPLEX TYPE 2	57		5	20		8			90
1399	HERPES VIRUS TYPING PENDING			1			1		2	4
1401	COXIELLA BURNETI	6			2			11		19
1512	VACCINIA VIRUS	1								1
1521	MEASLES VIRUS	1		2	1	2		1		7
1522	RUBELLA VIRUS	5	3	1	9		7	4	11	40
1530	HEPATITIS A VIRUS								5	5
1532	HEPATITIS B ANTIGEN			5	23		2		3	33
1535	HEPATITIS A ANTIBODY						2			2
1541	CHLAMYDIA A - TRIC TYPE	9		4					18	31
1556	CMV - CYTOMEGALOVIRUS	4	3	5	19	3	6	3	5	48
1564	ROTAVIRUS	167		5	2	7	8	2	11	202
1565	CALICI VIRUS	2						1		3
1571	ENTEROVIRUS TYPE 71 (BRCR)						2			2

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 3

REPORTING PERIOD - 18-10-79 . 31-10-79 BULLETIN NUMBER 79.22
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1599 ENTEROVIRUS TYPING PENDING.....		1	3	1	10	11			26
ROSS RIVER VIRUS							9		9
ASTROVORUS	2								2
PARVOVIRUS (LIKE)	8					5	1		14
Total.....	329	13	49	151	75	128	84	129	958

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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REPORTING PERIOD -18-10-79 - 31-10-79 BULLETIN NUMBER 79.22

VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
0100 ADENOVIRUS NOT TYPED	14	5	9						1	1	30
0101 ADENOVIRUS TYPE 1	1		3								4
0102 ADENOVIRUS TYPE 2	1		4								5
0103 ADENOVIRUS TYPE 3			1								1
0104 ADENOVIRUS TYPE 4	1		2			2					5
0105 ADENOVIRUS TYPE 5	2		3								5
0106 ADENOVIRUS TYPE 6						1			1		2
0107 ADENOVIRUS TYPE 7			7								7
0109 ADENOVIRUS TYPE 9										1	1
0111 ADENOVIRUS TYPE 11						1					1
0119 ADENOVIRUS TYPE 19			1			7			3		11
0129 ADENOVIRUS TYPE 29						1					1
0199 ADENOVIRUS TYPING PENDING	7		5			1					13
0201 INFLUENZA A VIRUS		6	2								8
0203 INFLUENZA B VIRUS		7	4								11
0301 PARAINFLUENZA VIRUS TYPE 1			1								1
0302 PARAINFLUENZA VIRUS TYPE 2			2								2
0303 PARAINFLUENZA VIRUS TYPE 3		1	16								17
0399 PARAINFLUENZA VIRUS TYPING PENDING										1	1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)		1	27								28
0500 RHINOVIRUS (ALL TYPES)			18							1	19
0600 MYCOPLASMA PNEUMONIAE		20									20
0700 ORNITHOSIS-PSITTACOSIS		9									9
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED	1										1
0803 COXSACKIEVIRUS A3			1								1
0809 COXSACKIEVIRUS A9										1	1
0902 COXSACKIEVIRUS B2			2								2
0903 COXSACKIEVIRUS B3	4		1	1							6
0904 COXSACKIEVIRUS B4	5		5	2							12
1000 ECHOVIRUS NOT TYPED	1		1	2							4
1004 ECHOVIRUS TYPE 4							1				1
1006 ECHOVIRUS TYPE 6	2										2

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 6

REPORTING PERIOD - 18-10-79 - 31-10-79 BULLETIN NUMBER 79.22
VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
1011 ECHOVIRUS TYPE 11	12		16	7							35
1017 ECHOVIRUS TYPE 17	1										1
1018 ECHOVIRUS TYPE 18			1								1
1022 ECHOVIRUS TYPE 22	1										1
1023 ECHOVIRUS TYPE 23	1										1
1025 ECHOVIRUS TYPE 25				2							2
1030 ECHOVIRUS TYPE 30	2		2	3							7
1101 POLIOVIRUS TYPE 1			1							1	2
1102 POLIOVIRUS TYPE 2	1										1
1103 POLIOVIRUS TYPE 3										2	2
1104 POLIOVIRUS-VACCINAL STRAIN	1										1
1200 MUMPS VIRUS		19	4	9							32
1300 HERPES VIRUS GROUP-NOT TYPED		2									2
1301 HERPES SIMPLEX VIRUS-NOT TYPED	1	9	7	2	23	3	1		22	4	72
1302 EPSTEIN-BARR VIRUS (EB VIRUS)		3									3
1303 VARICELLA-ZOSTER VIRUS		2			1						3
1306 HERPES SIMPLEX TYPE 1			13		20	2			6	4	45
1307 HERPES SIMPLEX TYPE 2			1						89		90
1399 HERPES VIRUS TYPING PENDING					4						4
1401 COXIELLA BURNETI		19									19
1512 VACCINIA VIRUS					1						1
1521 MEASLES VIRUS		6	1	2							9
1522 RUBELLA VIRUS		40									40
1530 HEPATITIS A VIRUS		5									5
1532 HEPATITIS B ANTIGEN		33									33
1535 HEPATITIS A ANTIBODY		2									2
1541 CHLAMYDIA A - TRIC TYPE						1			30		31
1556 CMV - CYTOMEGALOVIRUS		12	12				22		3	4	53
1564 ROTAVIRUS	202										202
1565 CALICI VIRUS	3										3
1571 ENTEROVIRUS TYPE 71 (BRCR)			1		1						2
1599 ENTEROVIRUS TYPING PENDING	16		11	2							29
ROSS RIVER VIRUS		9									9
ASTROVIRUS	2										2
PARVOVIRUS	14										14
Total	296	210	185	32	50	19	24		155	20	991

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

10th 4 Weekly Period for 1979...

BULLETIN ..79/22..

8.9.79 to 5.10.79 incl.

DISEASE	Total	N.S.W.	VIC	QLD	S.A.	W.A.	T.A.S.	N.T.	A.C.T.	CUMULATIVE TOTAL TO DATE FOR YEAR
Amoebiasis										15
Ankylostomiasis										131
Anthrax										1
Arbovirus infection	1			1						51
Brucellosis	4	2	2							43
Campylobacter infections										—
Chancroid										15
Cholera										—
Congenital rubella syndrome										—
Diphtheria										—
Donovanosis	14			14						50
Giardiasis										—
Genital herpes										—
Gonococcal ophthalmia neonatorum										—
Gonorrhoea	828	236	199	138	60	59	17	81	38	*9221
Hepatitis A (infectious)	121	27	24	25	7	11	4	17	6	1496
Hepatitis B (serum)	56	23	12	11	7		1	1	1	* 607
Hepatitis - unspecified										58
Hydatid disease	1	1								19
Lassa Fever										—
Legionnaires disease										—
Leprosy	2		1					1		39
Leptospirosis	1					1				44
Lymphogranuloma venereum										1
Malaria	27	4	6	12	4	1				281
Marburg Disease										—
Meningococcal infections	2			2						65
Non-specific urethritis										—
Ornithosis										9
Pertussis (whooping cough)	2		2							161
Plague										—
Poliomyelitis										—
Q. fever	25		2	19	4					458
Rabies										—

DISEASE	Total	N.S.W.	VIC	QLD	S.A.	W.A.	N.S.	N.T.	A.C.T.	[illegible]
Salmonella infections	77	2	14	6	27	11		15	2	1488
Shigella infections	61		2	1	4	19		35		466
Smallpox										—
Syphilis	232	42	7	105	13	30		35		*2348
Tetanus										10
Trachoma	1			1						1
Tuberculosis (all forms)	120	36	28	23	15	12	1	3	2	1249
Typhoid fever	2	2								20
Typhus (all forms)										2
Vibrio parahaemolyticus infections										—
Yellow Fever										—
Yersinia enterocolitica infections										—

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.

* Gonorrhoea + 45 cases for W.A. since last report. Total is now 9221 instead of 9176.

* Hepatitis B - 1 case for Queensland since last report. Total is now 607 instead of 608.

* Syphilis + 12 cases for W.A. since last report. Total is now 2348 instead of 2336.