AUSTRALIA

Bulletin Number 79/14
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Communicable Diseases Intelligence

Virus reports this period - 689 - with returns from 3 laboratories still to arrive, because of the postal dispute. The attached tables are therefore incomplete. Last two periods - 653 (with 2 laboratories missing), and 750.

Reports of interest:

. Respiratory syncytial virus (RSV) - 99 reports to date - a continuation of the trend over the previous 2 reporting periods (79/13 : 52 79/12 : 28)

. Measles - one of the 2 isolations reported was an 8 year old boy from Queensland with sub-acute sclerosing pan-encephalitis(SSPE)

. Ross River Virus - Two of the patients reported by the Brisbane State Health Laboratory this period had arrived from Fiji a short time prior to their illnesses. Diagnosis was by specific IgM detection.

Although full details are not available as yet it is interesting to speculate on the possibility of their having caught their infections in Fiji.

CDI No 79/12 of 22 June 1979 reported the detection and isolation of Ross River Virus infections in Fiji this year for the first time, by Professor Miles and Dr Mataika. As Ross River Virus is endemic in Australia, and only comparatively recently reported in Fiji, it is possible that the virus was initially introduced into Fiji by Australian visitors.

Its introduction by infected vector mosquitoes is less likely, as aircraft from Australia are sprayed on arrival in Fiji.

. Influenza - 24 reports of Influenza A and 5 of Influenza B received so far this period.

In addition to these, the Commonwealth Serum Laboratories in Melbourne have made a further seventeen isolations of Influenza A (H1N1). Fifteen of these were similar to A/Brazil/11/78 and two to A/USSR/90/77. As usual all

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isolations were from young people who presented with relatively mild clinical symptoms.

Dr S. Williams, Consultant Paediatrician in the Department of Community Welfare Services in Victoria has reported that in late May, 1979, a large number of infants and children in a childrens' reception centre developed URTI. Some had headache and muscular pains but mostly the clinical signs were those of rhinitis, pharyngitis and cough. The illness was mild in most cases and none developed pneumonia. Approximately 60% of the children and a number of the staff were affected. Two strains of Influenza A (Brazil) were isolated at the Virus Laboratory at Fairfield Hospital. The epidemic has now subsided.

Enterovirus 71 in Queensland (contributed by the staff of the State Health Laboratory - Brisbane)

Since November 1978, twenty-six enteroviruses reported in this Bulletin as untyped, have now been typed as Enterovirus 71. The specimens came from patients with a variety of clinical symptoms - eleven had skin lesions, five had aseptic meningitis, five had URTI, two had stomatitis, two had gastroenteritis and one female had a genital lesion (confirmed by re-isolation from the original specimen).

All isolates grew well in monkey embryo kidney (MEK) cells and none were isolated in suckling mice. However, when the MEK isolate was inoculated into suckling mice, the mice developed a paralysis similar to that caused by Group A coxsackievirus.

Typing was difficult and tedious. Most consistent results were obtained by producing immune serum in weaned mice and testing this with an Enterovirus 71 complement fixing antigen, prepared from suckling mouse carcasses.

Tuberculosis

Two outbreaks of tuberculosis of epidemiological interest which occurred recently in the UK are reported in the CDR of 8 June 1979.

A male swimming pool attendant aged 25 years, who had felt unwell and tired for two or three months, went sick on 11 February 1979 and was admitted to hospital on 13 February after a chest X-ray had revealed bilateral pulmonary cavitation. AFBs were seen in direct smear of sputum.

Screening of his very close contacts and of the swimming pool staff, the members of five swimming clubs and over 3 000 children who used the pool during the five previous months, has been carried out using chest radiology or tuberculin testing as appropriate.

The girl-friend of the index case, and her sister, have both been

notified as suffering from pulmonary tuberculosis. No cases were found among the rest of the swimming pool staff nor the members of the swimming clubs, but among the children using the pool one case of tuberculous meningitis, one of tuberculous pleural effusion and one of miliary tuberculosis have been notified, and 12 had primary complexes diagnosed by X-ray. It is of interest that none of these cases were in Asian immigrants. About 60 other children with strongly positive tuberculin skin tests are under surveillance and receiving antituberculous drugs.

The second case occurred in a British-born member of staff at a maternity unit in Lincoln. Because the patient was on night duty she had duties in all parts of the unit; it has therefore been found necessary to screen about 1 000 women and their babies, who may have been in contact with her in the unit during the six months before she went off sick. All the women are being offered a chest X-ray and Heaf test and all their babies a Heaf test. The staff of the maternity unit are having chest X-rays.

Comment

In Australia many members of the public, and even some health workers, including medical practitioners, have the impression that tuberculosis is a disease of the past and is no longer a problem in this country. This is not true. In contrast with other 'diseases of the past' - for example, poliomyelitis (one case in 1978) and diphtheria (3 cases notified last year), there were 1 292 new notifications of tuberculosis in 1978 of which 1 042 were pulmonary.

If reactivations are included, the total was 1 364 of which 1 106 were pulmonary. The rate for new notifications was 9.1 per 100 000 of mean population. This rate has remained reasonably constant around the 10 per 100 000 figure since 1974.

47.5% of all cases were in people born outside Australia and these persons account for only 20% of the population.

In 1948, when the Commonwealth entered into financial arrangements with the States for an anti-tuberculosis campaign, the incidence was 46.8 per 100 000. Over $300 million was spent in this campaign until the end of 1976 when it was decided that the States could absorb the campaign in their normal public health activities.

This country is currently admitting over 10 000 Indo-Chinese refugees per year, and the countries from which they come have higher incidences of tuberculosis than Australia. Many of our near neighbours have a tuberculosis prevalence of about 4-5%. Any refugees with tuberculosis are treated prior to departure and are non-infectious when entering this country but nevertheless require continuing treatment and follow up. In 1978, 237 cases were reported in these Indo-Chinese refugees.

While Australia has succeeded in reducing its incidence of

tuberculosis to low levels, caution will be required over the next 4-5 years to ensure that the incidence does not increase. The Australian population is vulnerable due to low exposure, and generally most receive no protection such as BCG vaccination.

Some doctors do not consider tuberculosis amongst the differential diagnosis, particularly of chest diseases, and unless they do so the incidence of the disease could well increase. The early diagnosis of one case may well prevent the occurrence of many other cases in certain circumstances.

The possibility of tuberculosis must therefore always be kept in mind, particularly in any obscure cases of generalised or respiratory disease.

β-lactamase producing N. gonorrhoeae

A further three isolates of this organism have been reported, bringing the notified Australian total to the end of June 1979 to 119.

The number of reported isolations for each six monthly period since the first Australian case in 1976 has been as follows:

	January to June	July to December
1976	3	6
1977	17	24
1978	24	18
1979	27	

During approximately the same three year period, Canada reported 26 cases up to May 1979 (CDWR 23 June 1979) and the U.S.A. 554 cases to February 1979 (MMWR 27 April 1979).

Although the isolation in the majority of Australian cases have been from travellers returning from South East Asian countries or contacts of persons recently returned from that area, other stated sources, where the infection was clearly imported, have included: "Papua New Guinea", "a London prostitute", "an air hostess" and "United States sailors".

There have also been cases, however, whose infection was acquired in "massage parlours" within Australia.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 28-6-79 - 11-7-79 BULLETIN NUMBER - 79/14

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHB/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
0100 ADENOVIRUS NOT TYPED					2	4	8	5	19
0101 ADENOVIRUS TYPE 1	1			1		4		1	7
0102 ADENOVIRUS TYPE 2						3		2	5
0103 ADENOVIRUS TYPE 3						1		4	5
0105 ADENOVIRUS TYPE 5				1		1		1	3
0107 ADENOVIRUS TYPE 7				1				1	2
0108 ADENOVIRUS TYPE 8				1					1
0119 ADENOVIRUS TYPE 19								4	4
0199 ADENOVIRUS TYPING PENDING					5	1			6
0201 INFLUENZA A VIRUS	1			7	1		15		24
0203 INFLUENZA B VIRUS				1			1	3	5
0301 PARAINFLUENZA VIRUS TYPE 1				1	2	5	2	6	16
0302 PARAINFLUENZA VIRUS TYPE 2				1		1			2
0303 PARAINFLUENZA VIRUS TYPE 3						2	1	3	6
0399 PARAINFLUENZA VIRUS TYPING PENDING						2	2		4
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)				12	55	2	20	10	99
0560 RHINOVIRUS (ALL TYPES)				9	2	5	2		18
0600 MYCOPLASMA PNEUMONIAE				2		7	15	3	27
0700 ORNITHOSIS-PSITTACOSIS				4					4
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED								2	2
0809 COXSACKIEVIRUS A9					1				1
0816 COXSACKIEVIRUS A16	1								1
0902 COXSACKIEVIRUS B2							2		2
0903 COXSACKIEVIRUS B3				1					1
0904 COXSACKIEVIRUS B4					1			1	2
0905 COXSACKIEVIRUS B5						1			1
1003 ECHOVIRUS TYPE 3						1			1
1006 ECHOVIRUS TYPE 6						1			1
1011 ECHOVIRUS TYPE 11				5	2			5	12
1013 ECHOVIRUS TYPE 13								1	1
1014 ECHOVIRUS TYPE 14							2		2

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VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ MVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1020 ECHOVIRUS TYPE 20							1		1
1022 ECHOVIRUS TYPE 22				1	6	2			9
1024 ECHOVIRUS TYPE 24				1					1
1030 ECHOVIRUS TYPE 30							1		1
1034 ECHOVIRUS TYPE 34						1			1
1101 POLIOVIRUS TYPE 1							2	1	3
1102 POLIOVIRUS TYPE 2						5		1	6
1103 POLIOVIRUS TYPE 3						1			1
1104 POLIOVIRUS-VACCINAL STRAIN					6				6
1200 MUMPS VIRUS				2		1	5	1	9
1300 HERPES VIRUS GROUP-NOT TYPED				5					5
1301 HERPES SIMPLEX VIRUS-NOT TYPED	2				4		22	32	60
1302 EPSTEIN-BARR VIRUS (EB VIRUS)						1			1
1303 VARICELLA-ZOSTER VIRUS						1			1
1306 HERPES SIMPLEX TYPE 1				18		14			32
1307 HERPES SIMPLEX TYPE 2				18		12			30
1399 HERPES VIRUS TYPING PENDING				2		5			7
1401 COXIELLA BURNETI				28			20		48
1521 MEASLES VIRUS				1			1		2
1522 RUBELLA VIRUS				2		2	1	3	8
1530 HEPATITIS A VIRUS								4	4
1532 HEPATITIS B ANTIGEN	4			29		6	10	12	61
1535 HEPATITIS A ANTIBODY						1			1
1541 CHLAMYDIA A - TRIC TYPE						3		26	29
1556 CMV - CYTOMEGALOVIRUS				10	2	3	1	3	19
1562 REOVIRUS (ALL TYPES)								1	1
1564 ROTAVIRUS				1	5	8			14
1566 NORWALK AGENT				1					1
1571 ENTEROVIRUS TYPE 71 (BRCR)				6					6
1599 ENTEROVIRUS TYPING PENDING					10	4			14
ROSS RIVER VIRUS							21		21
PARVOVIRUS (LIKE)						1			1
DENGUE							1		1
Total	9			172	104	111	157	136	689

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VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	OR	NR	GE	OT	TOTAL
0100 ADENOVIRUS NOT TYPED	12	2	3			1			1		19
0101 ADENOVIRUS TYPE 1	3	1	3								7
0102 ADENOVIRUS TYPE 2	5										5
0103 ADENOVIRUS TYPE 3	2		1			1				1	5
0105 ADENOVIRUS TYPE 5	1		2								3
0107 ADENOVIRUS TYPE 7			2								2
0108 ADENOVIRUS TYPE 8						1					1
0119 ADENOVIRUS TYPE 19					1	1			2		4
0199 ADENOVIRUS TYPING PENDING	2		4								6
0201 INFLUENZA A VIRUS		13	11								24
0203 INFLUENZA B VIRUS		4	1								5
0301 PARAINFLUENZA VIRUS TYPE 1		1	15							1	17
0302 PARAINFLUENZA VIRUS TYPE 2			2								2
0303 PARAINFLUENZA VIRUS TYPE 3		3	3								6
0399 PARAINFLUENZA VIRUS TYPING PENDING			4								4
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)		5	94					1			100
0500 RHINOVIRUS (ALL TYPES)			18								18
0600 MYCOPLASMA PNEUMONIAE		27									27
0700 ORNITHOSIS-PSITTACOSIS		4									4
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED	1		1								2
0809 COXSACKIEVIRUS A9	1										1
0816 COXSACKIEVIRUS A16					1						1
0902 COXSACKIEVIRUS B2			2								2
0903 COXSACKIEVIRUS B3				1							1
0904 COXSACKIEVIRUS B4			2								2
0905 COXSACKIEVIRUS B5				1							1
1003 ECHOVIRUS TYPE 3	1										1
1006 ECHOVIRUS TYPE 6			1								1
1011 ECHOVIRUS TYPE 11	6		5	2						1	14
1013 ECHOVIRUS TYPE 13	1										1
1014 ECHOVIRUS TYPE 14	2						1				3
1020 ECHOVIRUS TYPE 20	1										1

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VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
1022 ECHOVIRUS TYPE 22	9										9
1024 ECHOVIRUS TYPE 24				1							1
1030 ECHOVIRUS TYPE 30	1			1							2
1034 ECHOVIRUS TYPE 34	1										1
1101 POLIOVIRUS TYPE 1	3										3
1102 POLIOVIRUS TYPE 2	2		3				1				6
1103 POLIOVIRUS TYPE 3			1								1
1104 POLIOVIRUS-VACCINAL STRAIN	3		2				2				7
1200 MUMPS VIRUS		4	3	3							10
1300 HERPES VIRUS GROUP-NOT TYPED					4				1		5
1301 HERPES SIMPLEX VIRUS-NOT TYPED		2	9		21	1			26	5	64
1302 EPSTEIN-BARR VIRUS (EB VIRUS)		1									1
1303 VARICELLA-ZOSTER VIRUS		1									1
1306 HERPES SIMPLEX TYPE 1			8		18	1			6		33
1307 HERPES SIMPLEX TYPE 2									30		30
1399 HERPES VIRUS TYPING PENDING			1		3				3	1	8
1401 COXIELLA BURNETI		48									48
1521 MEASLES VIRUS		2									2
1522 RUBELLA VIRUS		7								1	8
1530 HEPATITIS A VIRUS		4									4
1532 HEPATITAS B ANTIGEN		61									61
1535 HEPATITIS A ANTIBODY		1									1
1541 CHLAMYDIA A - TRIC TYPE			1			2			26		29
1556 CMV - CYTOMEGALOVIRUS		2	4				10		2	2	20
1562 REOVIRUS (ALL TYPES)	1										1
1564 ROTAVIRUS	14										14
1566 NORWALK AGENT	1										1
1571 ENTEROVIRUS TYPE 71 (BRCK)			5							1	6
1599 ENTEROVIRUS TYPING PENDING	5		6	2						1	14
ROSS RIVER VIRUS		21									21
PARVOVIRUS	1										1
DENGUE (TYPE 3)		1									1
Total	79	215	217	11	48	8	14	1	97	14	704