

Communicable

Diseases
Intelligence

Virus reports this period : Total 813

Interesting reports include -

Echovirus type 30: An increase in infections with this virus has been recorded over the previous three periods for the year (8, 22, and 15 isolates respectively). This fortnight, 29 cases are reported, 17 of which are associated with a viral meningitis.

Meningitis cases due to Echovirus type 30 have been reported from Sydney, Canberra and Melbourne. Most age groups have been affected, i.e., /yr : 1 case; 1-4 yrs : 5 cases; 5-15 yrs : 7 cases; 15-35 yrs : 4 cases.

Dengue Fever*: From November 1978 to January 1979 six patients presented to Fairfield Infectious Diseases Hospital with symptoms and signs consistent with a diagnosis of dengue fever. All had recently returned from overseas. Two had become ill while away (10 and 11 days after arrival in Bali) and the others presented 2, 3, 4 and 7 days after return to Australia. One patient had holidayed in the Seychelles, and the remainder had been in Bali. All were adults.

Clinical features included fever, headache, myalgia, arthralgia, and rash. Illnesses lasted an average of five days.

Paired sera have been tested by HAI for Group B Arbovirus antibodies and a significant rise shown for each patient. These sera will now be referred for specific tests for dengue virus antibodies.

Influenza A.*: The first case of influenza at Fairfield Infectious Diseases Hospital for 1979 was an 11-year old boy admitted on 25 January. Since this patient had returned from five weeks in Papua New Guinea on the previous day, this seems to be an important infection. The provisional diagnosis of malaria was excluded by examination of the blood films and paired sera showed a significant antibody rise to influenza A by CFT. Unfortunately virus isolation was not attempted but HAI tests are proceeding.

RAHC in Sydney also reports a case of Influenza A ($H_{1N_{1}}$) in a 1-year old, believed to be contracted in Rome or Yugoslavia.

(* contributed by L. Irving, Fairfield Hospital, Melbourne.)

Coxiella burneti: A continuing increase in identifications is noted with 31 reports this period. This is compared with 17, 18 and 24 reports respectively for the previous periods this year.

Ross River Virus: The increase noted in 79/3 was not fully sustained in this period. 16 cases are reported compared with 31 in period 3.

S. muenchen outbreak in Perth (Prepared from reports from the Commissioner of Public Health, W.A., and from J.B. Iveson, A. Henderson, Judith A. Wright and V. Bamford, Public Health Enteric Diseases Unit, State Health Laboratory Services, W.A.)

More than 200 bacteriologically confirmed cases of infection with Salmonella muenchen have been diagnosed in Perth since mid-January. Case histories obtained so far have mostly included a history of consuming food products containing chicken, with onset of gastroenteritis 12-48 hours later. Secondary cases in families and other contacts have also been recorded. Cases have occurred in infants, children and adults. Approximately 60 cases, the majority being infants and young children, required hospital consultation or were admitted for treatment.

Commencing 24 January, S. muenchen was isolated from 9 patients who had attended or were directly associated with a wedding party on 20 January with 90 guests, of whom 30 reported symptoms of food poisoning. S. muenchen was also isolated from cooked chicken left over from the main course. Subsequent investigations resulted in the laboratory diagnosis of widespread S. muenchen in Perth. People affected included food handlers at the retail centre which supplied the chickens, and handlers at the processing plant implicated in the outbreak. The processing plant environment also displayed contamination with S. muenchen.

The epidemic has been traced to 10 poultry farms supplying a processing factory in a suburb of Perth. Very heavy infection rates on these farms, exceeding 50% amongst adult birds ready for slaughter, appeared to overwhelm the sanitary arrangements at the factory. This resulted in massive contamination of the processing areas, and a carrier rate of about 6% for S. muenchen among factory employees.

Although bacteriological examination of the feedstuffs has been negative so far, a contaminated batch of feed additive is suspected as the cause. Investigations of poultry suppliers, feedstuffs, food-handlers and clinical cases are continuing. No interstate shipments of chickens appear to have occurred from this factory.

Only 11 cases of S. muenchen infection were diagnosed in Perth during 1977, and 11 also in 1978. The predominant animal source in Western Australia appears to be native fauna species, particularly marsupials and reptiles. The serotype is also widely distributed in birds, abattoir effluents, natural waters and sewage in Perth, and is the major serotype isolated from raw pet meats containing kangaroo meat. S. muenchen is widely distributed throughout Western Australia in both human and non human sources, and is the predominant strain isolated from sporadic cases of human infection in both the northern Kimberley and Pilbara regions. From 1954-1977, it was the fourth most common serotype isolated from humans in Perth.

Large scale outbreaks of salmonellosis associated with the consumption of chickens have not previously occurred in W.A. In 1963, however, cold chicken was directly implicated as the source of infection in a family outbreak involving 27 persons. S. typhimurium phage 5 was isolated from 24 individuals in that episode.

Genital vaccinia (contributed by L. Irving, Fairfield Hospital, Melbourne)

Vaccinia virus has recently been isolated at Fairfield Hospital from three patients with genital lesions. The two female patients presented with superficial ulcers and vesicles, perianal in one and labial in the other. One woman gave her occupation as a "masseur". The third patient was a male with a groin lesion. Ages of these patients ranged from early twenties to thirties. It is not known if the patients were in contact with each other.

During 1978, vaccinia virus was isolated at Fairfield Hospital from another young male patient. He had perianal vesicles and had attended a massage parlour where the masseur had been recently vaccinated prior to travelling overseas.

Vaccinia is an unusual virus to be transmitted sexually, with massage parlours a possible source of dissemination.

Editor's note:

A computer search of the literature ("Medline") failed to detect any similar reports in the literature of the last 3 years.

 β -lactamase producing *N. gonorrhoeae*

A further 10 isolates of the above organism have been reported in Australia since the beginning of the year. These are:

Brisbane: male, from contact with prostitute in Sydney; male, acquired in the Philippines.

Perth: male, acquired in either Bali or Bangkok; male, acquired overseas (unspecified).

Melbourne: 2 males, aged 26 yrs and 31yrs, with infections acquired in Manila; male, 26 yrs, possibly acquired in Bali; male 30 yrs, possibly acquired in Timor; 2 males, age and source unspecified, with one a seaman.

These reports bring the total number of isolates of β -lactamase producing *N. gonorrhoeae* recorded since mid-1977 to 105.

Vaccination failures

In Bulletin 79/2, a request was made for information on cases of measles in which the patient had a fully documented measles vaccination history. Information was received, but the request is reiterated, this time with an emphasis on an invitation for data describing the frequency of such failures in the community. Results of local studies, either published or not, would be welcomed.

The National Biological Standards Laboratory in Canberra has requested statistics on the efficacy of pertussis vaccine used in Australia. As with the measles request, the aim is to establish the incidence of clinical disease in fully immunised patients. Any information that can be provided should be forwarded to the Editor, and will be transmitted to N.B.S.L.

Consideration of the reasons for vaccine failures should include aspects such as vaccine potency and handling, expiry dates, age of vaccine at time of administration and duration of protection. However, communities with efficient immunisation

programs may appear to demonstrate a significant vaccination failure rate, since the absolute number of failures will increase with the number of vaccine doses administered. A community with a comprehensive vaccination program will therefore record more vaccine failure cases than one with a poor program.

Salmonella isolates

The monthly inclusion of salmonella tables as in 1978, will be varied this year. Routine reporting will list only the totals for each serotype for the month, and detailed summaries will be included periodically.

Amendments to December figures - new total : 284

Add: *S. abony* 2, *S. anatum* 1, *S. bovis-morbificans* 4, *S. eastbourne* 1, *S. give* 1, *S. havana* 2, *S. hvittingfoss* 1, *S. infantis* 3, *S. litchfield* 1, *S. muenchen* 1, *S. newport* 5, *S. orientalis* 1, *S. oslo* 1, *S. potsdam* 1, *S. singapore* 1, *S. typhimurium* 98, *S. virchow* 2, *S. weltevreden* 2.

January 1979 - provisional total : 306

S. abony 3, *S. adelaide* 6, *S. anatum* 9, *S. arizonae* 1, *S. bareilly* 1, *S. bovis-morbificans* 11, *S. bredeney* 1, *S. breukelen* 2, *S. champaign* 1, *S. chester* 18, *S. derby* 1, *S. eastbourne* 2, *S. enteritidis* 4, *S. fremantle* 1, *S. give* 4, *S. gloucester* 1, *S. haifa* 1, *S. havana* 10, *S. heidelberg* 1, *S. hvittingfoss* 1, *S. infantis* 5, *S. java* 2, *S. kottbus* 1, *S. livingstone* 2, *S. lohbruegge* 1, *S. mississippi* 2, *S. muenchen* 82, *S. nchanga* 2, *S. newport* 12, *S. ohio* 2, *S. oranienberg* 1, *S. orion* 2, *S. paratyphi A* 1, *S. paratyphi B* 1, *S. poona* 1, *S. potsdam* 1, *S. rubislaw* 5, *S. saint-paul* 16, *S. senftenberg* 3, *S. singapore* 1, *S. tennessee* 1, *S. treforest* 1, *S. typhi* 2*, *S. typhimurium* 52*, *S. urbana* 1, *S. virchow* 11, *S. wordsworth* 4, *S. waycross* 1, *S. welikade* 2, *S. weltevreden* 2.

* *S. typhi* phage type M4-1, *S. typhi* phage type 28-1

* *S. typhimurium* phage types untyped 33; type 1 - 1; type 2 - 1; type 3 - 1; type 12a - 2; type 22 - 1; type 26 - 1; type 28 - 2; type 29 - 1; type 35 - 1; type 38 - 1; type 44 - 1; type 116 - 1; type 176 - 2; type 179 - 4; type 183 - 1.

Interesting cases: *S. paratyphi A* in 36 yr. female with P.U.O.; *S. paratyphi B* in 72 yr. male - cholecystectomy; *S. typhi* phage type M4 in 27 yr. male with fever - recent return from S.E. Asia; *S. typhi* phage type 28 in a 40 yr. male in northern N.S.W. Source of infection not established. Isolated from blood and faeces.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 8-2 -79 . 28.2.79 BULLETIN NUMBER 79.4
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMB	FAHC (NSW)	PHH/ POW (NSW)	FAIF- FIELD (VIC)	ECH (VIC)	IMVS (SA)	STATE	STATE	Total
	(NSW) WVH (ACT)						LAB (QLD)	LAB (WA)	
1011 ECHOVIRUS TYPE 11.....	1								1
1013 ECHOVIRUS TYPE 13.....	1								1
1014 ECHOVIRUS TYPE 14.....							1		1
1015 ECHOVIRUS TYPE 15.....							2		2
1016 ECHOVIRUS TYPE 16.....						1			1
1017 ECHOVIRUS TYPE 17.....	1						1		2
1018 ECHOVIRUS TYPE 18.....	1				2				3
1019 ECHOVIRUS TYPE 19.....	1								1
1022 ECHOVIRUS TYPE 22.....				3					3
1025 ECHOVIRUS TYPE 25.....							1		1
1027 ECHOVIRUS TYPE 27.....						1	1		2
1030 ECHOVIRUS TYPE 30.....	14				9	5	1		29
1033 ECHOVIRUS TYPE 33.....	1								1
1099 ECHOVIRUS TYPING PENDING.....							4		4
1101 POLIOVIRUS TYPE 1.....								1	1
1102 POLIOVIRUS TYPE 2.....							1		1
1103 POLIOVIRUS TYPE 3.....								1	1
1200 MUMPS VIRUS.....	3		3	9		2	4	2	23
1300 HERPES VIRUS GROUP-NOT TYPED.....	4			2					6
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	9		22	1	4		23	25	84
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....				1					1
1303 VARICELLA-ZOSTER VIRUS.....	7	2		1			1	1	7
1306 HERPES SIMPLEX TYPE 1.....	7	2		17		10			36
1307 HERPES SIMPLEX TYPE 2.....	45			17		13			75
1399 HERPES VIRUS TYPING PENDING.....	1					1			2
1401 COXIELLA BURNETTI.....	9		1			4	18		32
1502 PICORNA VIRUS-NOT TYPED.....								1	1
1521 MEASLES VIRUS.....			3	1	4		1		9
1522 RUBELLA VIRUS.....				3		2	2	7	14
1530 HEPATITIS A VIRUS.....								6	6
1532 HEPATITIS B ANTIGEN.....	1		16	24		16	10	14	81
1533 HEPATITIS B ANTIBODY.....						20	7	19	46

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VIRUS OR VIRAL ANTIGEN	ICPMR (NSW) / RVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1541 CHLAMYDIA A - TRIC TYPE.....								26	26
1556 CMV - CYTOMEGALOVIRUS.....	3	1	10	3	3	2	6	4	32
1562 CORONAVIRUS.....	3								3
1564 ROTAVIRUS.....			3	1		1		4	9
1571 ENTEROVIRUS TYPE 71 (BRCR).....				2					2
1599 ENTEROVIRUS TYPING DENNING.....		1	10		16	6			33
ROSS RIVER VIRUS.....						1	15	4	20
Total.....	138	10	91	130	54	102	141	147	813

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 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.....	7	3	3						1		14
0101 ADENOVIRUS TYPE 1.....		1	5								6
0102 ADENOVIRUS TYPE 2.....	3		8								11
0105 ADENOVIRUS TYPE 5.....	1		1								2
0107 ADENOVIRUS TYPE 7.....	2		5								7
0111 ADENOVIRUS TYPE 11.....						1					1
0116 ADENOVIRUS TYPE 16.....	1										1
0199 ADENOVIRUS TYPING PENDING.....	7		3							1	11
0201 INFLUENZA A VIRUS.....		15	1							1	17
0203 INFLUENZA B VIRUS.....		1									1
0204 INFLUENZA C VIRUS.....		1									1
0301 PARAINFLUENZA VIRUS TYPE 1.....		1	2								3
0302 PARAINFLUENZA VIRUS TYPE 2.....		1	2								3
0303 PARAINFLUENZA VIRUS TYPE 3.....		9	2								11
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)....		3									3
0500 RHINOVIRUS (ALL TYPES).....			15								15
0600 MYCOPLASMA PNEUMONIAE.....		74									74
0700 ORNITHOSIS-PSITTACOSIS.....		6									6
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....	1										1
0801 COXSACKIEVIRUS A1.....	1										1
0809 COXSACKIEVIRUS A9.....	1				2						3
0901 COXSACKIEVIRUS B1.....	1		1		1						3
0902 COXSACKIEVIRUS B2.....		1									1
0903 COXSACKIEVIRUS B3.....	2		1		1						4
0904 COXSACKIEVIRUS B4.....	1										1
0905 COXSACKIEVIRUS B5.....					1						1
1000 ECHOVIRUS NOT TYPED.....					1						1
1001 ECHOVIRUS TYPE 1.....	1										1
1003 ECHOVIRUS TYPE 3.....	1		1								2
1005 ECHOVIRUS TYPE 5.....	1		2		1						4
1007 ECHOVIRUS TYPE 7.....	1										1
1013 ECHOVIRUS TYPE 13.....								1			1

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 8.2 - 79 . 28.2.79 BULLETIN NUMBER . 79/4
VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	PA	BL	NA	CS	SK	EY	DR	BR	GE	OT	TOTAL
1564 ROTAVIRUS.....	9										9
1571 ENTEROVIRUS TYPE 71 (BRCR).....			2								2
1599 ENTEROVIRUS TYPING PENDING.....	23		7	4			1				35
ROSS RIVER VIRUS		20									20
Total.....	85	368	115	36	47	4	10	1	135	20	621

1979 REPORTING PERIOD - 8.2 - 79 . 28.2.79 BULLETIN NUMBER - 79/4

VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE