

Communicable

Diseases

Intelligence

Virus reports this period Total - 659 to date, with reports from two laboratories not received due to postal delays. (Last two periods : 750 and 645.)

- Influenza A - 41 reports, all from the Eastern States, compared with 45 reported in CDI 79/12 tables, and 33 in 79/11
- Respiratory syncytial virus (RSV) - 52 reports. This represents an increase over previous weeks (79/12 : 28; 79/11 : 24)
- Ross river virus - 33 reports this period, 31 of which were from Queensland. The comparatively high incidence this year, commented on in the previous issue of the CDI, appears to be continuing.

Adenovirus type 11 During 1978, only 4 adenovirus 11 reports were made to the CDI.

To date in 1979, a further 4 case reports have been received, all from New South Wales; 3 of the isolations have been from the eye and the other from the nasopharynx. Both children and young adults were involved.

The rarity of this infection was commented upon in the CDR of 29/6/79 in which 2 isolations from children were reported in one week in the U.K.

New Editor for CDI

Since November 1977, the Editor of the CDI has been Mr Geoff Noonan of the Environmental Health Branch of the Department of Health. Staff changes shall shortly occur within the Department with the result that a new Editor will eventually be appointed.

From the next issue however, the Acting Editor will be Dr Brian Dixon, also of the Environmental Health Branch. Enquiries previously directed to Mr Noonan should now be made to Dr Dixon on 062-898792, or at the address below.

Smallpox vaccination

With the World Health Organization's statutory two year period preceding final certification of global eradication of smallpox approaching - approximately 17 weeks to go after the end of June 1979 - the number of countries requiring smallpox vaccination of travellers direct from Australia is decreasing steadily. However approximately 40 countries - two-thirds of which are in Africa - still require valid certificates from all international travellers. Current information concerning requirements should therefore continue to be sought, prior to departure, from the Commonwealth or State Health Authorities in the various capital cities, to obviate unnecessary vaccination.

The MMWR (15/6/79) recently listed four examples of cases of adverse reactions following smallpox vaccination which occurred in 1978. These included a patient with chronic lymphocytic leukaemia who was vaccinated as proposed therapy for presumed herpes simplex infection; an army reservist taking cyclophosphamide, also for chronic lymphocytic leukaemia; a woman vaccinated for travel to Germany on the advice both of airline personnel and a military recruiting officer; and an Australian case in which an infected infant was born at 24 weeks gestation and survived for one hour, following vaccination of the mother when eight weeks pregnant (CDI 6-19 April 1978).

The report comments:

"These cases illustrate several important points:

1. Smallpox vaccine, a live virus vaccine, is contra-indicated in persons with haematologic or other malignancies, in persons on immunosuppressive therapy, and in pregnant women.
2. Smallpox vaccine apparently continues to be used by physicians for treatment of herpetic infections despite the failure to demonstrate efficacy and the proven danger of this therapy.
3. Airlines, travel agents, health facilities, and others who provide advice to travelers should be certain that their information regarding need for smallpox vaccination conforms to the latest international travel regulations.
4. Health-care providers should be aware that smallpox vaccination of active duty and active reserve U.S. military personnel is continuing. In addition, the military is not yet actively discouraging smallpox vaccination of dependents.
5. Fetal vaccinia, although very rare, can occur in offspring of vaccinees.

These cases and most of the others reported to CDC were avoidable....

....Health-care providers should be aware that the World Health Organization's International Health Regulations provide for smallpox vaccination waiver letters to be issued to travelers for whom vaccination is contraindicated for health reasons."

The National Health and Medical Research Council discussed current policy on smallpox vaccination - i.e., prior to final eradication - at its recent meeting, and its conclusions are reported below.

A proposal regarding vaccination policy following final certification of global eradication of smallpox was not endorsed by the relevant Advisory Committee of the Council and, consequently, was not considered by the Council at its meeting.

NH & MRC recommendations on communicable diseases

Following its 87th Session on 21 and 22 June 1979, the National Health and Medical Research Council announced the following recommendations relating to communicable diseases:

"Smallpox vaccination

Council reviewed its recommendation on smallpox vaccination, adopted at the Seventy-ninth Session.

It considered that the introduction of smallpox, perhaps by a vaccine modified case, must still be a possible risk until the two year period of WHO surveillance has passed without the occurrence of further cases. There was also a danger of cases emerging from regions in which eradication had not been officially confirmed.

Council agreed that although there was no justification for routine vaccination against smallpox, groups which might be exposed to special risk should be urged to undergo vaccination and re-vaccination at regular intervals.

It therefore recommended that travellers to countries requiring vaccination against smallpox, and persons in relevant occupations, for example medical practitioners, hospital and certain laboratory personnel, airport and ambulance service employees, should maintain their vaccination status until such time as the disease has been officially declared eradicated."

"Immunisation for communicable diseases

Council noted that in some sections of the community,

protection by immunisation against common infectious diseases was at an unsatisfactory level. This was due in part to recent publicity concerning adverse reactions to immunisation and the popular belief that serious outbreaks of communicable diseases were unlikely. Council viewed the situation with concern and recommended that the attention of the medical profession and of the public be drawn to the following:

Communicable diseases such as measles, whooping cough and rubella still cause significant morbidity and mortality, particularly amongst children. The most effective preventive measure was the maintenance of a high level of immunisation.

As with all medical procedures, immunisation was never entirely free from risk. The benefits, however, far outweighed any untoward effects. Provided that the contraindications to immunisation were observed, the risk of severe adverse reactions was minimal.

Active immunisation campaigns against such diseases should be promoted and encouraged by Governments at all levels, by the medical profession, and by concerned community groups.

Governments had a responsibility to ensure that vaccines in use were as safe and effective as possible and should accordingly set appropriate standards. Manufacturers must ensure that their products complied with such standards. Those administering such vaccines must follow good medical practice."

"Herpes virus infections

At its Eighty-fifth Session, Council had noted that both types I and II herpes simplex viruses (HSV) had been isolated from genital as well as extragenital lesions.

It had considered that there was a particular risk from HSV infection to infants born to mothers with no previous experience of infection by this virus, to maternity patients and to those with eczematous conditions.

Council reviewed its recommendation and agreed that sufferers from active HSV infection need not be excluded from contact with pregnant women until the third trimester of pregnancy. It also agreed that patients having intraocular surgery or penetrating eye injuries should not be exposed to HSV infections.

Council therefore recommended that sufferers from active herpes

simplex lesions, irrespective of type, be excluded from duties involving the handling of, or close contact with, infants, maternity patients in the third trimester of pregnancy, patients with eczematous conditions, and patients having intra-ocular surgery or penetrating eye injuries."

"Measles immunisation campaigns

Council noted overseas reports which indicated that immunisation campaigns against measles had considerably reduced the number of cases of measles which had occurred, the frequency of epidemics, and the occurrence of severe sequelae.

It considered that these could be similarly reduced in Australia by further increasing public immunity to the disease.

Council recommended that health authorities which conducted measles campaigns should intensify their efforts to obtain a more satisfactory level of immunity."

Editor's comment:

The current NH & MRC recommendation that measles immunisation be undertaken at or soon after the child's first birthday has been queried on account of the evidence that measles immunisation is more effective if undertaken at 15 months of age. Yeager⁽¹⁾ for example, reported that in a study involving 465 immunised children, 94% of infants immunised at 13 months or later had measles HI titres of 1:4 or greater compared with only 85% of those immunised at 12 months of age.

Estimates of measles immunisation coverage in Australia vary considerably. Recently quoted figures include 28.6% for N.S.W. and in the A.C.T., 85% of those children having their first birthday during 1978. Barnes⁽²⁾, in a study in three areas in the Hunter region of N.S.W., quotes coverages varying between 19% and 43% during the early 1970's.

Although it is hoped that the situation might have improved since then, it would be presumptuous to assume a current national coverage exceeding 50%. In which case emphasis placed on increasing attendances is considered to warrant higher priority than achieving a higher conversion rate in those who are immunised. The NH & MRC recommendation is based on the principle that until a highly efficient reminder system is in operation throughout the whole country, and while attendance for measles immunisation depends on a mother's memory, the child's first birthday is a land-mark less likely to be forgotten than an instruction, given nine months previously, to attend at 15 months of age.

References

- (1) Yeager A.S. et al (1977), JAMA 237:4. 347-351
- (2) Barnes R. (1978), Med. J. Aust. 2:316-318

Periods of exclusion from school of infectious disease cases and contacts

Council reviewed its document "Recommended Periods of Exclusion from School of Infectious Disease Cases and Contacts" (November 1973).

It agreed that some modification should be made to the entry for mumps to enable fully recovered children to return to school within the recommended 14 day exclusion period, should a medical practitioner certify that in his opinion the child had fully recovered.

Council amended the entry for mumps sufferers to read:

"Sufferers should be excluded for 14 days after the onset of symptoms if attending a pre-school or school, or until a medical certificate of recovery is produced."

Yellow fever vaccination

Australian quarantine procedures have, up till now, required persons of all ages who have been in a yellow fever endemic area within the previous 6 days, to be vaccinated against this disease prior to entry into Australia.

This requirement has recently been modified to exempt children aged less than 1 year, and WHO is being informed accordingly.

Yellow fever vaccination might be considered advisable in two groups of infants aged less than 1 year, but this procedure should be undertaken voluntarily as a personal protective measure or to comply with the requirements of countries being visited, namely:

- (i) infants likely to be at increased risk due to domicile in a country in which cases are occurring (see list below), and
- (ii) infants proceeding to a country which demands their vaccination as a condition of entry.

According to recent issues of the WER, countries in which yellow fever has been occurring recently are:

Africa: Angola, Gambia, Ghana, Nigeria, Sudan, Zaire
Americas: Brazil, Colombia, Ecuador, Peru, Venezuela,
and Trinidad Island.

NOTE: CDR of 29/6/79 states that Trinidad has now been declared "yellow fever free". The list of officially "endemic" countries contains many more than those detailed above, and valid certificates are required by all travellers aged over 1 year, recently returned from any of the endemic countries.

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AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 14-6-79 . 27-6-79 BULLETIN NUMBER . 79/13
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPMB		PHH/	FAIR-			STATE	STATE	Total
	(NSW) / WVH (ACT)	RAHC (NSW)	POW (NSW)	FIELD (VIC)	RCH (VIC)	IMVS (SA)	LAB (QLD)	LAB (WA)	
0100 ADENOVIRUS NOT TYPED.....				3		5	3	1	12
0101 ADENOVIRUS TYPE 1.....				1		4			5
0102 ADENOVIRUS TYPE 2.....				2		5			7
0103 ADENOVIRUS TYPE 3.....	1					1			2
0105 ADENOVIRUS TYPE 5.....				2		1			3
0106 ADENOVIRUS TYPE 6.....						1			1
0108 ADENOVIRUS TYPE 8.....				1					1
0119 ADENOVIRUS TYPE 19.....				1		1		5	7
0199 ADENOVIRUS TYPING PENDING.....					7	1			8
0201 INFLUENZA A VIRUS.....	11			9	3		17		40
0203 INFLUENZA B VIRUS.....					1				1
0301 PARAINFLUENZA VIRUS TYPE 1.....					13	3	2	4	22
0302 PARAINFLUENZA VIRUS TYPE 2.....				1		2			3
0303 PARAINFLUENZA VIRUS TYPE 3.....					2	2			4
0399 PARAINFLUENZA VIRUS TYPING PENDING..						1			1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS) ...				8	25		10	9	52
0500 RHINOVIRUS (ALL TYPES)				4	8	6	3		21
0600 MYCOPLASMA PNEUMONIAE.....	18				5	4	10	6	43
0700 ORNITHOSIS-PSITTACOSIS.....						1			1
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....								1	1
0899 COXSACKIEVIRUS GROUP A TYPING PENDING.....						1			1
0903 COXSACKIEVIRUS B3.....	1					1			2
0904 COXSACKIEVIRUS B4.....								1	1
1011 ECHOVIRUS TYPE 11.....				3				4	7
1014 ECHOVIRUS TYPE 14.....								1	1
1021 ECHOVIRUS TYPE 21.....	1					1			2
1024 ECHOVIRUS TYPE 24.....				1					1
1030 ECHOVIRUS TYPE 30.....	1			1					2
1101 POLIOVIRUS TYPE 1.....						1			1
1102 POLIOVIRUS TYPE 2.....				1			3		4

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REPORTING PERIOD - 14-6-79 . 27-6-79 BULLETIN NUMBER . 79/13
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR		PHH/	FAIR-			STATE	STATE	Total
	(NSW) / WVH (ACT)	RAHC (NSW)	POW (NSW)	FIELD (VIC)	RCH (VIC)	INVS (SA)	LAB (QLD)	LAB (WA)	
1200 MUMPS VIRUS.....	2			1	1		6	2	12
1300 HERPES VIRUS GROUP-NOT TYPED.....	2			2		2			6
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	11			1	2		17	24	55
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....				2					2
1303 VARICELLA-ZOSTER VIRUS.....	1			1		2			4
1306 HERPES SIMPLEX TYPE 1.....	3			8		5			16
1307 HERPES SIMPLEX TYPE 2.....	33			20		10			63
1399 HERPES VIRUS TYPING PENDING.....				1		4			5
1401 COXIELLA BURNETI.....	7			16		2	15		42
1514 MOLLUSCUM CONTAGIOSUM.....								1	1
1515 CONTAGIOUS PUSTULAR DERMATITIS (ORF VIRUS).....						1			1
1521 MEASLES VIRUS.....				2		1	2		5
1522 RUBELLA VIRUS.....						2		4	6
1530 HEPATITIS A VIRUS.....								4	4
1532 HEPATITIS B ANTIGEN.....				22		8	5	7	42
1535 HEPATITIS A ANTIBODY.....						1			1
1541 CHLAMYDIA A - TRIC TYPE.....	17							28	45
1556 CMV - CYTOMEGALOVIRUS.....	5			13	5	1		4	28
1564 ROTAVIRUS.....				3		6			9
1599 ENTEROVIRUS TYPING PENDING.....					10	3	2		15
ROSS RIVER VIRUS				1			31	1	33
PARVOVIRUS(LIKE)						1			1
Total.....	114			133	82	91	126	107	653

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 14-6-79 . 27-6-79 BULLETIN NUMBER . 79/13
 VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EI	UR	BR	GE	OT	TOTAL
0100 ADENOVIRUS NOT TYPED.....	5	2	4				1				12
0101 ADENOVIRUS TYPE 1.....	3		2								5
0102 ADENOVIRUS TYPE 2.....	3		4								7
0103 ADENOVIRUS TYPE 3.....			1				1				2
0105 ADENOVIRUS TYPE 5.....	1		2								3
0106 ADENOVIRUS TYPE 6.....			1								1
0108 ADENOVIRUS TYPE 8.....							1				1
0119 ADENOVIRUS TYPE 19.....							2		5		7
0199 ADENOVIRUS TYPING PENDING.....	4		3				1				8
0201 INFLUENZA A VIRUS.....		22	18								40
0203 INFLUENZA B VIRUS.....			1								1
0301 PARAINFLUENZA VIRUS TYPE 1.....			21					1			22
0302 PARAINFLUENZA VIRUS TYPE 2.....			3								3
0303 PARAINFLUENZA VIRUS TYPE 3.....		1	3								4
0399 PARAINFLUENZA VIRUS TYPING PENDING.....			1								1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....		2	49					1			52
0500 RHINOVIRUS (ALL TYPES).....			21								21
0600 MYCOPLASMA PNEUMONIAE.....		43									43
0700 ORNITHOSIS-PSITTACOSIS.....		1									1
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....	1										1
0899 COXSACKIEVIRUS GROUP A TYPING PENDING.....						1					1
0903 COXSACKIEVIRUS B3.....			2								2
0904 COXSACKIEVIRUS B4.....	1										1
1011 ECHOVIRUS TYPE 11.....	2		4	1							7
1014 ECHOVIRUS TYPE 14.....										1	1
1021 ECHOVIRUS TYPE 21.....	1		1								2
1024 ECHOVIRUS TYPE 24.....			1								1
1030 ECHOVIRUS TYPE 30.....	1		1	2							4
1101 POLIOVIRUS TYPE 1.....	1										1
1102 POLIOVIRUS TYPE 2.....	3		1								4
1200 MUMPS VIRUS.....		6	4				1			1	12

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 14 - 6 - 79 . 27 - 6 - 79 BULLETIN NUMBER . 79/13
 VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	PA	BL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
1300 HERPES VIRUS GROUP-NOT TYPED.....					4				2		6
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....		2	4	1	20				23	3	53
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....		2									2
1303 VARICELLA-ZOSTER VIRUS.....		3			1						4
1306 HERPES SIMPLEX TYPE 1.....			6		8	1			2		17
1307 HERPES SIMPLEX TYPE 2.....					2				61		63
1399 HERPES VIRUS TYPING PENDING.....					2				2	1	5
1401 COXIELLA BURNETI.....		42									42
1514 MOLLUSCUM CONTAGIOSUM.....					1						1
1515 CONTAGIOUS PUSTULAR DERMATITIS (ORF VIRUS).....					1						1
1521 MEASLES VIRUS.....		4	1								5
1522 RUBELLA VIRUS.....		6									6
1530 HEPATITIS A VIRUS.....		4									4
1532 HEPATITIS B ANTIGEN.....		42									42
1535 HEPATITIS A ANTIBODY.....		1									1
1541 CHLAMYDIA A - TRIC TYPE.....		4	1						43		48
1556 CMV - CYTOMEGALOVIRUS.....	2	8	6				6		4	3	29
1564 ROTAVIRUS.....	9										9
1599 ENTEROVIRUS TYPING PENDING.....	10		4	1			1				16
ROSS RIVER VIRUS.....		33									33
PARVOVIRUS.....	1										1
Total.....	48	228	170	5	40	7	8	2	142	9	659

DISEASE	Total	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	CUMULATIVE TOTAL TO DATE FOR YEAR
Salmonella infections	161	9	4	12	53	56	7	20		953
Shigella infections	53				8	8		36	1	202
Smallpox										-
Syphilis	231	42	8	67	27	12		74	1	678
Tetanus	2	1	1							5
Trachoma										-
Tuberculosis (all forms)	106	35	32	17	10	9	1	1	1	500
Typhoid fever	4		2	1		1				14
Typhus (all forms)	1			1						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.

*Hepatitis Unspecified

+ 1 case for Western Australia since the last report. Total is now 28 instead of 27.

DISEASE	Total	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	CUMULATIVE TOTAL TO DATE FOR YEAR
Salmonella infections	154	46	9	5	53	31		9	1	1107
Shigella infections	52			4	12	9		27		254
Smallpox	-									-
Syphilis	149	70	9		8	15		47		827
Tetanus	1			1						6
Trachoma	-									-
Tuberculosis (all forms)	130	43	28	29	8	13	2	5	2	630
Typhoid fever	1		1							15
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.

*Ankylostomiasis

+ 29 cases for the Northern Territory since the last report. Total is now 71 instead of 42.