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Communicable Diseases Intelligence

Bulletin number 82/21
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Contents:

- Vaccinia necrosum - USA.
- Guidelines for bacteriological clearance of salmonella and shigella excreters - Scotland.

VIRUS REPORTING SCHEME - A total of 1036 reports were received this period.

. The State Health Laboratory, Brisbane, reported specific IgM against rubella virus in a 22 year old female who had received Cendehill rubella vaccine when 15 weeks pregnant. The specimen had been referred by a private pathologist to monitor the patient's serological response.

The NH and MRC recommend that since rubella virus can cross the placental barrier, immunisation of pregnant women is contra-indicated. As far as possible, steps should be taken to ensure that a vaccinated woman does not become pregnant for at least two menstrual cycles. Although the final decision must rest with the individual patient and her physician, inadvertant vaccination need not be a reason to recommend interruption of pregnancy.

Since 1971, CDC, Atlanta, has maintained a register of women who received rubella vaccine within the three months before or after conception, and who were prospectively followed-up to quantitate the risk of foetal abnormalities (MMWR (1982) 31 : 477). Of the 730 pregnant women who received rubella vaccine, 538 received either Cendehill or HPV-77 (Meruvax) vaccines, 189 received RA 27/3 vaccine and three received rubella vaccines of an unknown type. The outcome of conception was known for 500 of the 538 recipients of Cendehill or HP-77 vaccines. Two hundred and ninety (58%) of the vaccinees had full-term pregnancies, and none of the newborns had abnormalities compatible with congenital rubella syndrome (CRS), although eight infants showed evidence of intrauterine infection. Information was available on 177 of the 189 recipients of the RA 27/3 vaccine. No CRS cases were detected among the newborns of the 153 (86%) vaccinees who elected to go to term. Therefore the observed CRS risk to date is zero, albeit the theoretical maximum risk for the occurrence of CRS in the highest risk period for viraemia and foetal defects (one week before and four weeks after conception) may be as high as 3%.

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VACCINIA NECROSUM AFTER SMALLPOX VACCINATION - USA
(Based on MMWR (1982) 31 : 501).

On 1 April 1982, a 61 year old female with a two year history of severe recurrent genital herpes received a smallpox vaccination in an attempt to treat the disease. A persistent ulcer developed at the vaccination site on her left arm. On 5 May she was hospitalised for the first time for treatment of the vaccinia necrosum, when the ulcer measured 5 x 5 cm and yielded vaccinia virus on culture. She had multiple erythematous perineal ulcers from which herpes virus was recovered. Initial investigation revealed a haemoglobin of 10.8, white blood cell count of 3200/mm^3 and a normal immunoelectrophoresis, although specific immunoglobulins were low (IgA = 10 mg/100 ml; IgG = 310 mg/100 ml and IgM = 15 mg/100 ml). Intermediate Purified Protein Derivative (PPD), histoplasmin, candida and mumps skin tests were negative. During hospitalisation from 5-15 May, the patient received vaccinia immune globulin (VIG), oral thiosemicarbazone and intravenous acyclovir. The perineal ulcers cleared almost entirely and became negative on virus culture. However, the left arm ulcer was unchanged and continued to yield vaccinia virus.

During follow-up investigation as an outpatient, her arm ulcer enlarged gradually. When the patient was rehospitalised from 1-14 June, the arm ulcer measured approximately 8 x 7 cm, but she had no evidence of acute genital herpes. VIG, oral thiosemicarbazone and interferon (five million units intramuscularly daily for ten days) were administered. When she was discharged on 14 June, her arm ulcer was approximately the same size as on admission, and a small lesion, believed to be a minor scratch or mosquito bite, was present on the left thigh. The patient was treated as an outpatient with intravenous interferon (eight million units, three times a week). The left arm ulcer remained approximately the same size but showed some signs of epithelialisation. However, the lesion on the left thigh increased in size to an ulcer approximately 2.5 cm in diameter. Both the left arm and the left thigh ulcers repeatedly yielded vaccinia virus. The patient was hospitalised for the third time from 15-20 July for surgical removal of the ulcer on her left thigh, and retreatment with interferon, thiosemicarbazone and VIG. In addition, she received four doses of transfer factor at the University of Michigan, Ann Arbor.

On last examination, the site of the leg lesion still yielded vaccinia virus, and the arm lesion had shown no signs of improvement. Other modes of therapy being considered include surgical removal of the left arm ulcer and treatment with thymosin.

The Editor of MMWR commented that the severe course of her herpes and vaccinia infections suggested underlying immunosuppression or deficiency, although no specific immunological defect has yet been identified. This case demonstrates the risk of using smallpox vaccination, a treatment with no proven effectiveness, for herpes disease.(1) The US Food and Drug Administration published recently a warning to all medical practitioners on the inappropriate use of smallpox vaccination for herpes infection.(2)

Editorial Comment

Vaccinia necrosum is the most severe, sometimes fatally, of the complications occuring after smallpox vaccination. It often resulted when a person with an immunological deficiency was inadvertently vaccinated. It occurred commonly with infant immunisations before deficiency states had been recognized, with immunisation of patients with cancer who were planning their "last trip abroad" and with its misuse as therapeutic treatment of recurrent herpes simplex infection, warts or any other disease caused by an unrecognized immunological deficiency state.

In March 1982, a special WHO Committee on Orthopoxvirus Infections strongly reaffirmed the previous recommendation of the Global Commission for the Certification of Smallpox Eradication that "No one except investigators at special risk should be vaccinated in any country including those where monkeypox cases have occurred".(3) The Committee also noted that unnecessary vaccination may be regarded as constituting medical malpractice, and that the vaccination of military personnel should be discouraged. In 1981, the California Board of Medical Quality Assurance took disciplinary action against a practitioner who administered smallpox vaccine in 1978 to a 53 year old man with chronic lymphocytic leukaemia in an attempt to treat recurrent genital herpes, and who subsequently developed severe vaccinia necrosum.(4) The two vaccinia cases reported to CDI in 1981 involved one vaccination complication of a Navy serviceman(5) and one environmental exposure in a general practitioner's surgery where smallpox vaccination had been used regularly for the treatment of warts.(6)

No countries are now known to be requiring smallpox vaccination certificates from travellers, and the Thirty-Fourth World Health Assembly in May 1981 amended the International Health Regulations, effective from January 1982, abolishing the requirement of International Certificate of Vaccination or Revaccination against smallpox.

Smallpox vaccine is no longer commercially available in Australia from the Commonwealth Serum Laboratories Commission as from 1 August 1982(7). A reserve stock will continue to be held in the national interest.

References

1. MMWR (1980) 29 : 417
2. FDA Drug Bulletin (1982) 12 : 12
3. WER (1982) 57 : 105
4. California Morbidity (1981) #45
5. CDI (1981) 81/9 : 1
6. CDI (1981) 81/24 : 1
7. AMA Gazette, September 1982 : 4

GUIDELINES FOR BACTERIOLOGICAL CLEARANCE OF SALMONELLA AND SHIGELLA EXCRETERS - SCOTLAND
(Based on CDS (1981) 81/48 : 6)

In recent years there has been an increasing awareness by many bacteriologists, medical practitioners and health workers that a flexible, liberal policy be considered for symptom-free excreters of salmonella organisms (other than Salmonella typhi and S. paratyphi). Differences in interpretation can arise with some health authorities imposing unnecessary prolonged periods of exclusion while others take little or no action to

exclude or to investigate, without any apparent subsequent spread of infection or other adverse consequences. Consideration must also be given to advances in the technological ability of laboratories using selective media enabling the detection of very small numbers of organisms in a faecal sample. Although the following guidelines on restrictions of activity of salmonella excreters have been drafted from analyses of Scottish cases, the advice is also pertinent to cases in Australia.

Persons in the food trade working exclusively with canned, wrapped or raw goods or driving food vehicles, may be categorised along with food workers who "handle" cooked or otherwise prepared products. Those who are otherwise physically well, may be excluded for many days, weeks or possibly months while waiting to achieve an arbitary clearance standard of three, or in some instances six, consecutive negative stool samples. Convalescent excreters employed in abattoirs or poultry-processing factories for example may be excluded for similarly lengthy periods regardless of their day-to-day occupational exposure to salmonella infection from their working environment. Another anomaly, which is perhaps more widespread in its application, is the belated action of retrospective exclusion of staff who are usually symptom-free, if they were ever ill at all, some days or longer after the outbreak is over.

School-teachers or children due to sit examinations have also been known to have been rigidly excluded while awaiting bacteriological clearance in the belief that they might present a danger to other children. With the notable exception of the relative ease of spread of Shigella sonnei in a nursery class, such transmission rarely occurs. S. typhi, which still appears to be equated with other salmonella serotypes in the deliberations of some health workers, does not spread readily from the symptom-free excreter. The so-called "food-poisoning" salmonellae which are mostly of animal origin, appear to require the "boosting" effect of a suitable food medium in order to multiply further before causing human illness. There is no evidence implicating a symptom-free food worker as the source of a documented outbreak of salmonella "food-poisoning" in the UK. On the other hand, the careless or uninformed food-worker who does not properly wash hands between handling raw foods and cooked foods readily contributes to the transmission of organisms within the kitchen environment.

However, there is no clear-cut, single answer to the myriad of differing circumstances which may have to be taken into consideration in the clearance of food-workers and others believed to be posing a risk to the public health. Individuals of doubtful personal hygiene standards working with pre-cooked and other cold foods should always be excluded, or if possible transferred to a more suitable temporary alternative form of employment. Individual employment, social and/or personal situations may be complicated. The small one-or-two man business may pose certain problems as may an excreting head-chef or dairy-man. The symptom-free excreting dairy-man for example may in fact present more danger to his cattle and milk via septic tank effluents than by returning to work in the dairy. If the milk produced goes for pasteurisation there is little, if any, danger to the consumer. Nurses in hospitals are theoretically a problem where working with immuno-suppressed or otherwise compromised patients. A greater risk exists from the transmission of organisms from patient to patient via contaminated soiled linen, equipment, bed-pans or even hands, than from the bowel of a symptom-free, hand-washing, excreting nurse.

Food-workers who are household contacts of an excreter of either salmonella or shigella organisms need not automatically be excluded from work, or debarred from the home, if they have remained symptom-free. Social contact with an excreting girl- or boy-friend seldom, if ever, appears to be considered as a reason for exclusion. The exclusion of symptom-free water department employees who are found to be excreting is also over-rigid, being a consequence of the Croydon typhoid outbreak in 1937. The Scottish Development Memorandum (No. 13/1979) on "Water Supply Hygiene - Safeguards in the Operation and Management of Waterworks in Scotland "(paragraph 3.4) in referring to gastrointestinal and prolonged feverish illness states that employees "should not be permitted to return without clearance from the medical adviser." However, the Memorandum does not state that the clearance should be bacteriological. It is suggested that medical advisers to local authorities may have to spend more time considering each individual case, and if necessary to interview employees, following a gastrointestinal illness and prior to return to work. However, if an employer such as a Regional Water Department or large food business wishes to continue exclusion of an employee at their own expense, this may well have to be acceded to.

Considerable time and effort may be required to re-educate employees, employers and the general public from their continuing polemics to equate the dangers of the symptom-free salmonella execreter with those of other more traditional intestinal pathogens. Even those pathogens primarily of human origin e.g. S. typhi, S. sonnei, and V. cholerae have been particularly uncommon as causes of food-borne infection in the UK in recent decades. However, direct person-to-person spread of salmonellosis continues to be a problem while bowel symptoms persist. Much more attention needs to be given to health education, especially the value of hand-washing, and more significantly to the importance of good food hygiene practice. The screening for symptom-free excreters in a food establishment is of secondary importance compared to investigating the food-chain and the correction of faulty practices. Screening should in fact be regarded as an optional extra if considered desirable by the medical adviser or the bacteriologist. Much unnecessary personal anguish, social ostracism and even loss of employment can also occur where symptomless excreters are highlighted and followed-up excessively, or even unnecessarily where no "risk" occupation is involved. Considerable time, money and effort would be saved by a more rational approach. The limited resources of environmental health departments would be more usefully utilised in preventing "food-poisoning" occurring through inspection and education than in the lengthy, possibly unnecessary, follow-up of excreters and their contacts after the outbreak or incident is over.

In particular, a more liberal and flexible approach to the exclusion (or non-exclusion) of salmonella excreters appears necessary. There is no doubt that persons not fully recovered clinically from a gastrointestinal illness should always be excluded, but it is suggested that symptom-free food-workers and other persons must not be automatically excluded from work or school whether as an execreter or as a household contact. Symptomless excreters should be considered in one of two categories;-

. Category A - Those who present a possible risk of transmitting bowel pathogens from fingers into food or to other persons by reasons of the nature of their work.

. Category B - Those persons of little or no risk i.e. all others.

However, excreters of S. typhi and S. paratyphi, although less frequently a problem in recent years, continue to require to be considered separately and may have to be excluded for longer periods awaiting bacteriological clearance, Clearance should also include periodic urine examination to exclude the occassional possibility of urinary carriage of S. typi (see Table 1).

TABLE 1 - Guidelines for bacteriological clearance of symptom-free persons excreting salmonella species and shigella species before resuming work or school.

	Number of consecutive negative faecal samples		
Category	S. typhi/S. paratyphi	Other salmonella spp.	Shigella spp.
A	12	3	3
B	6	-	-

Category A includes;

. Food-workers preparing or servicing foods not subject to further heating e.g. those employed in commercial and institutional catering, or in bakeries and other similar retail outlets.

. Nurses preparing meals as above, and those working in nurseries, paediatric or intensive care units, including the care of immuno-suppressed patients.

. Children under five years of age attending nursery schools, playgroups etc.

. Any other person of doubtful personal hygiene or with unsatisfactory toilet, hand-washing and hand-drying facilities at home, work or school.

Category B comprise all other persons not included above where bacteriological clearance is considered necessary. For many occupations; it is not necessary to obtain such bacteriological clearance prior to resuming work. Where bacteriological clearance is considered necessary, there should be a minimum of 72 hours after the cessation of any antibiotic treatment which may have been given before the first stool specimen is submitted, and at least 48 hours between subsequent specimens.

However, it must be emphasised that these recommendations are in the form of a suggested code of practice for the purpose of providing guidelines only. Decisions made by the medical adviser have to be based on the individual circumstances of each and every case. When in doubt, and where symptoms persist, exclusion must take priority; but more consideration should be given to possible earlier return to work than has often hitherto been the case. Clearance standards may possibly be eased further in due course, and it is suggested that the guidelines currently being recommended should be reviewed regularly.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 30/9/82 - 13/10/82 BULLETIN NUMBER . 82/21
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

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
0100 ADENOVIRUS NOT TYPED	15						6	6	27
0101 ADENOVIRUS TYPE 1	1			2	1	3		1	8
0102 ADENOVIRUS TYPE 2			1	1	1	1		1	5
0103 ADENOVIRUS TYPE 3	1	4				1		1	7
0105 ADENOVIRUS TYPE 5	1			1	2	1		1	6
0106 ADENOVIRUS TYPE 6					1				1
0111 ADENOVIRUS TYPE 11								1	1
0113 ADENOVIRUS TYPE 13								1	1
0114 ADENOVIRUS TYPE 14								1	1
0119 ADENOVIRUS TYPE 19						1		1	2
0199 ADENOVIRUS TYPING PENDING		1	3		6	2			12
0201 INFLUENZA A VIRUS	5		1	4		18	5	1	34
0202 INFLUENZA A VIRUS SUBTYPE H3N2				1			10		11
0203 INFLUENZA B VIRUS	6		5	1		9	6	14	41
0301 PARAINFLUENZA VIRUS TYPE 1	3							1	4
0302 PARAINFLUENZA VIRUS TYPE 2								5	5
0303 PARAINFLUENZA VIRUS TYPE 3	2			1	3	1	5	4	16
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	3	3		8	8	2	3	8	35
0500 RHINOVIRUS (ALL TYPES)				1	8		8	1	18
0600 MYCOPLASMA PNEUMONIAE	27	4	7	1	1	6	11	9	66
0700 ORNITHOSIS-PSITTACOSIS	1		1						2
0809 COXSACKIEVIRUS A9				2					2
0816 COXSACKIEVIRUS A16	4								4
0901 COXSACKIEVIRUS B1		1							1
0904 COXSACKIEVIRUS B4						1			1
0905 COXSACKIEVIRUS B5			1					2	3
1003 ECHOVIRUS TYPE 3	1								1
1011 ECHOVIRUS TYPE 11		1				1		32	34
1014 ECHOVIRUS TYPE 14								1	1
1015 ECHOVIRUS TYPE 15	1								1
1021 ECHOVIRUS TYPE 21					1				1
1022 ECHOVIRUS TYPE 22			3						3
1101 POLIOVIRUS TYPE 1							1	1	2
1102 POLIOVIRUS TYPE 2		1							1
1103 POLIOVIRUS TYPE 3						1		1	2
1104 POLIOVIRUS-VACCINAL STRAIN			3						3
1199 POLIOVIRUS TYPING PENDING						1			1
1200 MUMPS VIRUS	11				1	1	5	2	20
1300 HERPES VIRUS GROUP-NOT TYPED	13			1		7			21
1301 HERPES SIMPLEX VIRUS NOT-TYPED		1		2		1		75	79
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	6		1					3	10
1303 VARICELLA-ZOSTER VIRUS	1	1	3	1					6
1306 HERPES SIMPLEX TYPE 1	9			22		9	11		51
1307 HERPES SIMPLEX TYPE 2	58			39		12	56		165
1399 HERPES VIRUS TYPING PENDING			10		7	3			20
1401 COXIELLA BURNETI	5					1	8		14
1502 PICORNA VIRUS-NOT TYPED								2	2
1514 MOLLUSCUM CONTAGIOSUM		1							1
1515 CONTAGIOUS PUSTULAR DERMATITIS (ORF VIRUS)		1				1			2
1521 MEASLES VIRUS	1		2	5	1		1		10
1522 RUBELLA VIRUS	1		3	7	2		5	3	21
1532 HEPATITIS B ANTIGEN			4	33		15	7	10	69
1535 HEPATITIS A ANTIBODY			1	4		3	12	5	25
1541 CHLAMYDIA A - C TRACHOMATIS	29		4			1		38	72
1556 CMV - CYTOMEGALOVIRUS	8		2	12	4	5	1	7	39
1564 ROTAVIRUS	7	11	1	3		3	1		26
1599 ENTEROVIRUS TYPING PENDING			3		7				10
ROSS RIVER VIRUS							1		1
ASTROVIRUS	2								2
SMALL VIRUS (LIKE) PARTICLE	3			2					5
DENGUE							1		1
Total	225	30	59	154	54	111	164	239	1,036

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 30/9/82 to 13/10/82 .... 82/21

Viral Identifications by Clinical Information Table 1.
Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Encephalitis; M3 -Meningitis; 04 -Paralysis; 05,13 -CNS other unspec.; 07,49 -GI; 17,47 -Hepatic; 19 -CVS; 89 -Urinary; 06 -Skin/mucous.

VIRUS OR VIRAL ANTIGEN	No-ill or data	Respir atory	Enceph alitis	Mening -itis	Para- lysis	CNS other unspec	GI	Hepa -tic	CVS	Urin -ary	Skin/ mucs memb
0101 ADENOVIRUS TYPE 1.....		3				2	3				
0102 ADENOVIRUS TYPE 2.....	1	3					1				
0103 ADENOVIRUS TYPE 3.....	1	4									
0105 ADENOVIRUS TYPE 5.....		4					1				1
0106 ADENOVIRUS TYPE 6.....							1				
0111 ADENOVIRUS TYPE 11.....									1		
0114 ADENOVIRUS TYPE 14.....		1									
0201 INFLUENZA A VIRUS.....		25	1						1		
0202 INFLUENZA A VIRUS SUBTYPE H3N2		10		1							
0203 INFLUENZA B VIRUS.....	3	22				2			2		1
0301 PARAINFLUENZA VIRUS TYPE 1....	1	3									
0302 PARAINFLUENZA VIRUS TYPE 2....		4									
0303 PARAINFLUENZA VIRUS TYPE 3....	1	13							1		
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	2	32		1							
0500 RHINOVIRUS (ALL TYPES).....	1	15									
0600 MYCOPLASMA PNEUMONIAE.....	13	40		1		1			2		1
0700 ORNITHOSIS-PSITTACOSIS.....		1									
0809 COXSACKIEVIRUS A9.....				1							
0816 COXSACKIEVIRUS A16.....											4
0901 COXSACKIEVIRUS B1.....		1									
0904 COXSACKIEVIRUS B4.....				1							
0905 COXSACKIEVIRUS B5.....				1			1				
1011 ECHOVIRUS TYPE 11.....	5	5	1	16			1		1		
1014 ECHOVIRUS TYPE 14.....				1							
1015 ECHOVIRUS TYPE 15.....				1							
1022 ECHOVIRUS TYPE 22.....							3				
1101 POLIOVIRUS TYPE 1.....		1									
1102 POLIOVIRUS TYPE 2.....		1									
1103 POLIOVIRUS TYPE 3.....		1					1				
1104 POLIOVIRUS-VACCINAL STRAIN....							3				
1200 MUMPS VIRUS.....	3	3	2	1							
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1			1						1	50
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	4									1	
1303 VARICELLA-ZOSTER VIRUS.....											3
1306 HERPES SIMPLEX TYPE 1.....		4	1				1	1		1	20
1307 HERPES SIMPLEX TYPE 2.....		1	1							1	15
1401 COXIELLA BURNETI.....	2										
1514 MOLLUSCUM CONTAGIOSUM.....											1
1515 CONTAGIOUS PUSTULAR DERMATITIS (ORF VIRUS).....											2
1521 MEASLES VIRUS.....	2	1									7
1522 RUBELLA VIRUS.....	8										12
1532 HEPATITIS B ANTIGEN.....	33							32			1
1535 HEPATITIS A ANTIBODY.....	1							23			
1556 CMV - CYTOMEGALOVIRUS.....	6	4		1		3		1		6	
1564 ROTAVIRUS.....							24		1		
ROSS RIVER VIRUS											1
ASTROVIRUS							2				
SMALL VIRUS (LIKE) PARTICLE							5				
DENGUE											1
Total.....	88	202	6	27		8	47	57	9	10	121

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 30/9/82 to 13/10/82 ... 82/21
Viral Identifications by Clinical Information Table 2.
Code 10 -Eye; 59 -Genital; 39 -Endo/sal gland;
38 -RES; 29 -Muscle/joint; 69 -Congenital; P8 -PUO;
G8 -Fever/malaise; 09 -Other; A1 -SIDS ...

VIRUS OR VIRAL ANTIGEN	Eye	Genital	Endo/sal gland	RES	Muscle/joint	Congenital	PUO	Fever/malaise	Other	SIDS
0101 ADENOVIRUS TYPE 1.....							1	1		
0103 ADENOVIRUS TYPE 3.....	2									
0105 ADENOVIRUS TYPE 5.....	1									
0113 ADENOVIRUS TYPE 13.....		1								
0119 ADENOVIRUS TYPE 19.....		1								
0201 INFLUENZA A VIRUS.....			1		1		4	1	1	
0202 INFLUENZA A VIRUS SUBTYPE H3N2								1		
0203 INFLUENZA B VIRUS.....					1		5	3	2	
0302 PARAINFLUENZA VIRUS TYPE 2....							1			
0303 PARAINFLUENZA VIRUS TYPE 3....					1					
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....									1	
0500 RHINOVIRUS (ALL TYPES).....		1								1
0600 MYCOPLASMA PNEUMONIAE.....				1	2		3	3		
0700 ORNITHOSIS-PSITTACOSIS.....									1	
0809 COXSACKIEVIRUS A9.....									1	
0905 COXSACKIEVIRUS B5.....							1			
1011 ECHOVIRUS TYPE 11.....								2		
1101 POLIOVIRUS TYPE 1.....										1
1200 MUMPS VIRUS.....			9				1		3	
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1	27								
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			4				1	1		
1303 VARICELLA-ZOSTER VIRUS.....				2			1			
1306 HERPES SIMPLEX TYPE 1.....	2	18						4	1	
1307 HERPES SIMPLEX TYPE 2.....		140							1	
1401 COXIELLA BURNETI.....					1		4	8		
1522 RUBELLA VIRUS.....									2	
1532 HEPATITIS B ANTIGEN.....					1				2	
1541 CHLAMYDIA A - C TRACHOMATIS...	3	68								
1556 CMV - CYTOMEGALOVIRUS.....		2				7	2	3	4	
1564 ROTAVIRUS.....									1	
DENGUE								1		
Total.....	9	258	14	3	7	7	24	28	20	2

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

9th 4 Weekly Period for 1982
(15.8.82 to 11.9.82 inclusive)

Bulletin 82/21

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	15
Ankylostomiasis									—	66
Anthrax									—	—
Arbovirus infection		1							1	57
Brucellosis	3								3	23
Campylobacter infections	8	N.N.	N.N.	15	N.N.	N.N.	N.N.	N.N.	23	296
Chancroid				N.N.		N.N.	N.N.		—	7
Cholera									—	—
Congenital rubella syndrome		N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	—	—
Diphtheria								1	1	1
Donovanosis		N.N.	10	N.N.		N.N.	6		16	83
Giardiasis	6	N.N.	N.N.	44	N.N.	N.N.	N.N.	N.N.	50	438
Genital herpes	1	N.N.	N.N.	22	N.N.	N.N.	3	N.N.	26	221
Gonococcal ophthalmia neonatorum		N.N.			N.N.	N.N.	N.N.	N.N.	—	1
Gonorrhoea	296	259	118	45	112	5	51	7	893	8913
Hepatitis A (infectious)	15	12	14	14	6	1	2	1	65	849
Hepatitis B (serum)	9	24	7	12	4		2		58	569
Hepatitis - unspecified	14	N.N.			9	N.N.	N.N.		23	103
Hydatid disease									—	9
Lassa Fever			N.N.			N.N.	N.N.	N.N.	—	—
Legionnaires disease			N.N.		N.N.	N.N.	N.N.	N.N.	—	10
Leprosy				1					1	23
Leptospirosis				2					2	59
Lymphogranuloma venereum		N.N.	N.N.	N.N.	N.N.	N.N.			—	1
Malaria	3	3	12	6	1		2	4	31	355
Marburg Disease			N.N.			N.N.	N.N.	N.N.	—	—
Meningococcal infections		3	2	4		N.N.			9	52
Non-specific urethritis	6	N.N.	N.N.	106	N.N.	N.N.	N.N.	N.N.	112	899
Ornithosis									—	8
Pertussis (whooping cough)	2	3	N.N.		N.N.	N.N.	N.N.	N.N.	5	143
Plague									—	—
Poliomyelitis									—	—
Q. fever	21		21	5	N.N.		N.N.		47	179
Rabies		N.N.	N.N.			N.N.	N.N.	N.N.	—	—

DISEASE	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	CUMULATIVE TOTAL TO DATE FOR YEAR
Salmonella infections	48	13	13	12	2	5	1	4	98	1524
Shigella infections	2	1	1	1	3		6		14	284
Smallpox									—	—
Syphilis	104	21	96	10	16		26		273	2271
Tetanus		2							2	10
Trachoma		N.N.			N.N.	N.N.			—	—
Tuberculosis (all forms)	27	26	16	10	7		4		90	921
Typhoid fever									—	18
Typhus (all forms)									—	1
Vibrio parahaemolyticus infections		N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	—	—
Yellow Fever									—	—
Yersinia enterocolitica infections		N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	—	—

(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.)

N.N. Not Notifiable

Adjustments

Brucellosis	NSW	- 1
Campylobacter	NSW	+ 13
Genital herpes	SA	- 40
Hepatitis A	SA	- 6
Non-specific urethritis	SA	- 143
Shigella	SA	- 2
Tuberculosis	SA	- 1
Syphilis	NSW	- 18