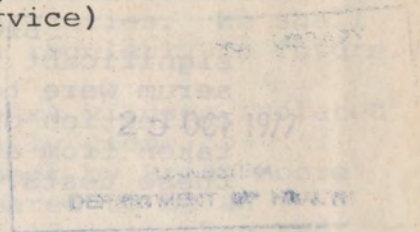


AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE  
(incorporating the National Microbiological  
Laboratory Reporting Service)

BULLETIN 19  
9-22 September 1977



You will perhaps already have noticed the new title for the expanded bulletin. Our thanks go to the eight readers who sent in suggested titles.

Circulation of this issue is 250 copies.

OUTBREAK OF INFLUENZA-LIKE ILLNESS - BRITISH COLUMBIA (taken from Canada diseases weekly report, with additional material from IMVS Adelaide, and the Australian Army.)

On August 5, 1977, a Canadian Forces aircraft left Brisbane, Australia, carrying 145 Australian infantrymen. The troops were bound for Victoria, British Columbia, with refuelling stops in Nandi, Fiji, and Honolulu, Hawaii. The 18-hour flight arrived in Victoria at 0800 hours on August 6.

Within 12 hours after arrival, 12 Australians were seen with influenza-like symptoms consisting of moderate fever, anorexia, cough, malaise and headache. Over the next 96 hours, 62 more cases were seen. The symptoms lasted for about 24-48 hours, during which time the patients were fairly sick and some demonstrated radiographic evidence of interstitial pneumonitis. There were no further primary cases after August 10.

An interview of the troops revealed that the first evidence of the illness occurred on July 26 and that there had been 17 sporadic cases over the next 10 days before departure from Australia. There was a total of 91 primary cases in an 18-day period with an attack rate of 62.8%.

Between August 6 and 11, 20 secondary cases occurred among Canadian Forces personnel - 15 in the Victoria area and 5 among the Trenton, Ontario-based flight crew involved in the ferry flight. Incubation of the secondary cases ranged from 36 to 96 hours. Course of the illness was less than 48 hours with rapid full recovery.

Five tertiary cases experienced onset of symptoms on August 11 and 12. Four cases were Canadian Forces personnel who had contact only with the secondary cases. The last and only non-military case was a 3-year-old boy, whose father was a primary Canadian case. He developed symptoms on August 12.

Blood was taken from 98 military cases. The only significant finding was leucopenia. Acute and convalescent serum were to be examined for antibody estimation following collection of 21-day convalescent serum. Throat swabs were taken from all cases. We have as yet received no results of these tests.

Most of the troops involved in the Canadian outbreak had come from Woodside Camp near Adelaide, South Australia, where 40 soldiers reported sick on 8 August, and a further 100 on 9-10 August. Patients presented with inflamed throat, aches and pains, lassitude, and anorexia. However they were afebrile or had only a mild pyrexia. Tetracycline was prescribed.

Information was provided about a dinner held at the camp on the night of 5 August, but the troops who went to Canada had left on 1 August, so this is not necessarily significant. There had been no influenza vaccination program amongst the troops this year.

Because of the international interest the Institute of Medical and Veterinary Science was asked to assist with investigation, but by then (17 August) it was one week after the major outbreak, and virus culture was considered unlikely to prove rewarding. This proved to be the case. No viruses were grown from throat swabs of 9 men whose throats still showed some degree of inflammation. Nor was any virus grown from samples of faeces.

Blood samples were collected from 16 men, 8 in whom illness preceded the main outbreak, 4 who developed illness during the outbreak and 4 whose infections developed subsequent to the main wave. The blood samples were tested for antibodies to Influenza A, B, Adenovirus and Mycoplasma pneumoniae, hoping to show a distribution of antibody titres which might reflect the cause of the outbreak. In the 8 pre-outbreak patients there was evidence of recent influenza A infection in two, of M. pneumoniae infection in one, and equivocal evidence of both infections in a fourth. No recent infections were demonstrated in the 4 outbreak patients, but two of the 4 post-outbreak patients showed evidence of recent influenza A infection.

Later, specimens from 10 additional troops who presented between 26 August and 7 September were forwarded. Three throat swabs yielded viruses - 2 Influenza A and an as yet untyped Enterovirus. Serology tests on these patients are still in progress.

Other paired sera have been tested for ASOT and ADB levels, but nothing to support a Streptococcal origin of the outbreak has been found.

INFLUENZA TYPING (contributed by the WHO influenza centre at the Commonwealth Serum Laboratories. We shall be publishing these reports regularly in future.)

All but one of the 18 type A influenza viruses isolated in June, July and August have been antigenically close to A/Vic/3/75 in one-way HI tests. An isolate sent by Brian Moore at I.M.V.S., i.e. "A/SA/1/77", initially appeared to be an antigenic variant, being inhibited 4- to 8- fold less than the homologous virus by anti-A/VIC/3/75 ferret serum and by anti-pure A/VIC/3/75 HA rabbit serum. However, on egg passage the difference practically disappeared, suggesting that the strain was initially "non-avid" on isolation. Difficulty was experienced in obtaining ferrets to prepare serum for complete HI typing, so the strain has been sent to CDC and WIC.

The two type B isolations made in June proved to be close to B/HK/5/72.

A CASE OF NEONATAL MUMPS (contributed by Laboratory of Pathology and Microbiology, Brisbane)

Mumps virus was isolated from several different specimens from a neonate with coagulation abnormality, raised intracranial pressure, and apnoeic episodes. The baby succumbed when nine days old and mumps virus was isolated from pooled tissues collected at post-mortem. The mother presented with bilateral parotid enlargement, probably mumps, three days before confinement.

CORONAVIRUS IN FAECES FOLLOWING TRAVEL (contributed by Fairfield Hospital)

Coronavirus - like particles were detected by E.M. in the faeces of a 24 year old man who had returned from overseas via India 6 weeks ago. Coronavirus has been demonstrated in faecal specimens of patients with gastroenteritis in England, while in India and Adelaide these particles have been reported in faeces but not associated with disease.

Clinical features of this patient's illness suggest that his diarrhoea is due to either ulcerative colitis or amoebic dysentery but the finding is of interest as we have not previously seen Coronavirus in faecal specimens and because of the history of travel in India.

A CASE OF Q FEVER (contributed by Fairfield Hospital)

Serological evidence of Q Fever infection has been demonstrated in a 44 year old woman who works in a meat processing factory, her duties involving cutting up fresh carcasses. She presented with one week's history of drenching sweats and haematuria and antibody titres 15 days apart were:

	Q I	Q II
1st Serum	< 4	< 4
2nd Serum	< 4	> 128

CHOLERA

Up to midnight 20 September there had been 403 cases of cholera in the epidemic in the Gilbert Islands, with 17 deaths. The daily admission rate was by then levelling off and new admissions were mostly mild cases. The emergency was therefore regarded as ended but active preventive measures and surveillance were being continued. Persons departing from the Gilbert Islands were required to have valid vaccination certificates against cholera, and Australia has donated 12,000 doses of vaccine. Only limited detail of microbiological investigations has reached us - all we know is that separate coliforms in water have not been identified, but that McConkey agar plate counts are high enough to demonstrate faecal pollution.

In Syria there had been 73 deaths in 2514 cases notified from June to 25 September. Up to 27 September there had been 33 cases, with no deaths, in an outbreak in southern Iraq and the outskirts of Baghdad; 14 of these cases had been notified in the latest 24 hour registration period. Stringent precautions have been announced.

Information from WHO on the outbreak in Bangladesh is that 375 deaths have been proven but that the figure may be much higher. The mortality rate of around 8 1/4% is attributed partly to delays in obtaining treatment, and compares with mortality of 1-2% at the Cholera Research Laboratory in Dacca.

NATIONAL MICROBIOLOGICAL LABORATORY REPORTING SERVICE

PERIOD 19  
 DATES 9-9-'77 to 22-9-'77

LABORATORY

VIRUS OR VIRAL ANTIGEN	BRISBANE STATE LAB.	SYDNEY/CANBERRA			MELBOURNE		ADELAIDE	PERTH	TOTAL
		ICPMR/ WVH	RAHC	PHH/POW	FAIR- FIELD	RCH	IMVS	STATE LAB.	
0100 Adenovirus not typed	2				1			1	4
0101 " type 1					2	1	1	1	5
0102 " " 2		1				2	1	2	6
0103 " " 3						1	4		5
0105 " " 5			1				2		3
0107 " " 7			1			1		1	3
0119 " " 19								2	2
0201 Influenza A virus	2	29			4		4	1	40
0202 " A virus subtype H3N2 (former A2)	7				11	3	5		26
0203 " B virus				1			5		6
0301 Parainfluenza virus type 1	1					1		1	7
0302 " " " 2	1	4						1	5
0303 " " " 3	4							4	19
0400 Respiratory syncytial virus (RS)	4				1	6	4	4	15
0500 Rhinovirus (all types)	8				2	5			18
0600 Mycoplasma pneumoniae	2	10			2		1	3	2
0700 Ornithosis-psittacosis					2				1
0804 Coxsackievirus A4							1		1
0816 " A16	1								1
1006 Echovirus type 6		4			3	1	2		10
1007 " " 7					1				1
1009 " " 9		4			2		4	3	13

NATIONAL MICROBIOLOGICAL LABORATORY REPORTING SERVICE

PERIOD 19  
 DATES 9.9.'77 to 22.9.'77

LABORATORY

VIRUS OR VIRAL ANTIGEN	BRISBANE STATE LAB.	SYDNEY/CANBERRA			MELBOURNE		ADELAIDE	PERTH STATE LAB.	TOTAL
		ICPMR/W/H	RAHC	PHH/POW	FAIR-FIELD	RCH	IMVS		
1011 Echovirus type 11		4							4
1014 " " 14								1	1
1017 " " 17					2				2
1018 " " 18		5							5
1019 " " 19						1			1
1021 " " 21	2								2
1022 " " 22			1			2	1	1	5
1024 " " 24		1							1
1031 " " 31	1								1
1101 Poliovirus type 1	1					1			2
1102 " " 2					1	1	1		3
1103 " " 3						1			1
1104 " - vaccinal strain				3					3
1105 Sabin poliovirus			1						1
1200 Mumps virus	2				3		1	1	7
1301 Herpes simplex virus - not typed	12	7	1	1	1	5			27
1302 Epstein-Barr virus (EB virus)							2		2
1303 Varicella-Zoster virus		3				1	1	1	6
1306 Herpes simplex type 1		21			15		7		43
1307 " " " 2		14			5		11		30
1401 Coxiella burneti	24				1		1		26
1502 Picorna virus - not typed								1	1
1521 Measles virus		1	2				1		4

PERIOD 19  
 DATES 9.9.'77 to 22.9.'77

VIRUS OR VIRAL ANTIGEN	BRISBANE STATE LAB.	SYDNEY/CANBERRA			MELBOURNE		ADELAIDE	PERTH STATE LAB.	TOTAL
		ICPMR/WVH	RAHC	PHH/POW	FAIR-FIELD	RCH	IMVS		
1522 Rubella virus					4				4
1532 Hepatitis B antigen	6	1		8	19		7	9	50
1533 " B antibody	18						18	16	52
1534 " B antigen and antibody								7	7
1541 TRIC - Trachoma-Inclusion conjunctivitis								3	3
1556 CMV - cytomegalovirus	11	4		2		2	2	7	28
1563 Coronavirus					1				1
1564 Rotavirus	3	3		5	5		14	4	34
myxovirus								1	1
Ross River	3								3
<b>TOTAL TYPED VIRUSES</b>	<b>115</b>	<b>116</b>	<b>7</b>	<b>20</b>	<b>88</b>	<b>35</b>	<b>101</b>	<b>72</b>	<b>554</b>
0199 Adenovirus type pending	3					3			6
0899 Coxsackievirus group A type pending	1								1
1099 Echovirus type pending		1							1
1300 Herpes virus not typed		1			1		2	1	5
1399 " " type pending								22	22
1599 Enterovirus type pending						2			2



PERIOD 19  
DATE 9.9.'77 to 22.9.'77

## SOURCE OF SPECIMEN

VIRUS OR VIRAL ANTIGEN	SOURCE OF SPECIMEN										TOTAL	
	FA	BL	NA	CS	SK	EY	UR	GE	BR	OT		
1018 Echovirus type 18			4			1						5
1019 " " 19	1											1
1021 " " 21			2									2
1022 " " 22	3		2									5
1024 " " 24										1		1
1031 " " 31	1											1
1101 Poliovirus type 1	1		1									2
1102 " " 2	1		1							1		3
1103 " " 3	1											1
1104 " - vaccinal strain	2											2
1105 Sabin poliovirus	1		1									2
1200 Mumps virus		4	2				1			1		8
1301 Herpes simplex virus - not typed		2	8	2	5	1		7		2		27
1302 Epstein-Barr virus (EB virus)	2											2
1303 Varicella-Zoster virus		3	1		2							6
1306 Herpes simplex type 1	1		10		18	1		6		7		43
1307 " " " 2					2			26		1		29
1401 Coxiella burneti		26										26
1502 Picorna virus - not typed	1											1
1521 Measles virus		4										4
1522 Rubella virus		4										4
1532 Hepatitis B antigen		50										50
1533 " B antibody		52										52
1534 " B antigen and antibody		7										7
1541 TRIC - Trachoma-Inclusion conjunctivitis								3				3





LIST B COMMUNICABLE DISEASES AND AGENTS NOTIFIED AFTER HOSPITAL AND LABORATORY DIAGNOSIS

25. 8. '77

DISEASES	CASES NOTIFIED DURING WEEK								CUMULATIVE TOTAL - year to date*							
	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.
AMOEBIASIS	N.N.								N.N.							
ANKYLOSTOMIASIS	N.N.								N.N.							
ARBO VIRUS INFECTION			N.N.		N.N.						N.N.		N.N.			
DENGUE					N.N.								N.N.			
MURRAY VALLEY ENCEPHALITIS			N.N.	N.N.	N.N.		N.N.				N.N.	N.N.	N.N.		N.N.	
OTHER (STATE TYPE)				N.N.	N.N.		N.N.					N.N.	N.N.		N.N.	
HYDATID																
MALARIA																1
ORNITHOSIS (PSITTACOSIS, etc)																
Q. FEVER							N.N.									N.N.
SALMONELLA (LABORATORY ISOLATES)						1										48
SHIGELLA (LABORATORY ISOLATES)	N.N.									N.N.						

N.N. - NOT NOTIFIABLE

\* - INCLUDES ADJUSTMENTS FOR REVISED DIAGNOSIS OR OTHER AMENDMENT.

QLD. (+) - MONTHLY NOTIFICATION OF GONORRHOEA AND SYPHILIS.



1. 9. '77

LIST B COMMUNICABLE DISEASES AND AGENTS NOTIFIED AFTER HOSPITAL AND LABORATORY DIAGNOSIS

DISEASES	CASES NOTIFIED DURING WEEK								CUMULATIVE TOTAL - year to date*							
	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.
AMOEBIASIS	N.N.								N.N.							
ANKYLOSTOMIASIS	N.N.								N.N.							226
ARBO VIRUS INFECTION			N.N.		N.N.						N.N.		N.N.			
DENGUE					N.N.								N.N.			
MURRAY VALLEY ENCEPHALITIS			N.N.	N.N.	N.N.		N.N.				N.N.	N.N.	N.N.		N.N.	
OTHER (STATE TYPE)				N.N.	N.N.		N.N.					N.N.	N.N.		N.N.	
HYDATID																
MALARIA									1						1	7
ORNITHOSIS (PSITTACOSIS, etc)																
Q. FEVER							N.N.								N.N.	
SALMONELLA (LABORATORY ISOLATES)														48		46
SHIGELLA (LABORATORY ISOLATES)	N.N.									N.N.						140

N.N. - NOT NOTIFIABLE

\* - INCLUDES ADJUSTMENTS FOR REVISED DIAGNOSIS OR OTHER AMENDMENT.

QLD. (+) - MONTHLY NOTIFICATION OF GONORRHOEA AND SYPHILIS.

Director-General of Health



9. 9. '77

LIST B COMMUNICABLE DISEASES AND AGENTS NOTIFIED AFTER HOSPITAL AND LABORATORY DIAGNOSIS

DISEASES	CASES NOTIFIED DURING WEEK								CUMULATIVE TOTAL - year to date*							
	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.
AMOEBIASIS	N.N.								N.N.	5	16	3	4			
ANKYLOSTOMIASIS	N.N.		40		1				N.N.		44		16			226
ARBO VIRUS INFECTION			N.N.		N.N.						N.N.		N.N.			
DENGUE					N.N.						1		N.N.			
MURRAY VALLEY ENCEPHALITIS			N.N.	N.N.	N.N.		N.N.				N.N.	N.N.	N.N.		N.N.	
OTHER (STATE TYPE)				N.N.	N.N.		N.N.					N.N.	N.N.		N.N.	
HYDATID									8	1	1	2	1			
MALARIA	6	1	1		1				54	34	44	14	17	1	9	7
ORNITHOSIS (PSITTACOSIS, etc)										1			1			
Q. FEVER	1		2				N.N.		119		354	7			N.N.	
SALMONELLA (LABORATORY ISOLATES)	1	3		4	5				541	88	54	172	207	48	35	46
SHIGELLA (LABORATORY ISOLATES)	N.N.		1					4	N.N.		67	57			5	144

N.N. - NOT NOTIFIABLE

\* - INCLUDES ADJUSTMENTS FOR REVISED DIAGNOSIS OR OTHER AMENDMENT.

QLD. (+) - MONTHLY NOTIFICATION OF GONORRHOEA AND SYPHILIS.

Director-General of Health



16. 9. '77

LIST B COMMUNICABLE DISEASES AND AGENTS NOTIFIED AFTER HOSPITAL AND LABORATORY DIAGNOSIS

DISEASES	CASES NOTIFIED DURING WEEK								CUMULATIVE TOTAL - year to date*							
	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	A.C.T.	N.T.
AMOEBIASIS	N.N.		1						N.N.	5	17	3	4			
ANKYLOSTOMIASIS	N.N.		1		1				N.N.		45		17			
ARBO VIRUS INFECTION			N.N.		N.N.						N.N.		N.N.			
DENGUE					N.N.						1		N.N.			
MURRAY VALLEY ENCEPHALITIS			N.N.	N.N.	N.N.		N.N.				N.N.	N.N.	N.N.		N.N.	
OTHER (STATE TYPE)				N.N.	N.N.		N.N.					N.N.	N.N.		N.N.	
HYDATID									8	1	1	2	1			
MALARIA	1		1		1				55	34	45	14	18			9
ORNITHOSIS (PSITTACOSIS, etc)										1						
Q. FEVER	1		16				N.N.		120		370	7				N.N.
SALMONELLA (LABORATORY ISOLATES)	8	7		6	5				549	95	54	178	212			35
SHIGELLA (LABORATORY ISOLATES)	N.N.								N.N.		67	57				5

N.N. - NOT NOTIFIABLE

\* - INCLUDES ADJUSTMENTS FOR REVISED DIAGNOSIS OR OTHER AMENDMENT.

QLD. (+) - MONTHLY NOTIFICATION OF GONORRHOEA AND SYPHILIS.

Director-General of Health