AUSTRALIA
Communicable Diseases Intelligence

Bulletin Number 78/1
Reporting Period 29 Dec 1977 - 11 Jan 1978

FOLLOW-UP ON MULTIPLE ANTIBIOTIC RESISTANT PNEUMOCOCCI IN SOUTH AFRICA (M.M.W.R. January 6, 1978)

From May to November 1977, type 19A pneumococci resistant to multiple antibiotics were isolated from blood, cerebrospinal fluid, or pleural fluid of 15 South African children, 8 of whom died. In addition, many other hospitalized children had pharyngeal or sputum cultures positive for these organisms and had signs and symptoms of pneumonia. Almost all infections occurred in children previously hospitalized for other medical conditions, notably malnutrition, measles and pneumonia.

A survey of 28 hospitals in Johannesburg and Durban found carriers of multiply-resistant pneumococci in 8, and these were isolated mainly from black children less than 3 years of age. Only 0.9% (4/434) of the staff caring for these children were found to be carriers, and spread between hospitals appeared to have resulted from transfer of patients later found to be infected. No new cases of illness due to multiply-resistant organisms have been found since November 1977.

Documentation of the antibiotic resistance patterns of the pneumococci is given in the M.M.W.R. of January 6, 1978.

CAMPYLOBACTER SPECIES (C.D.W.R. 3-46 and C.D.W.R. 3-50; B.M.J. July 2, 1977)

Considerable attention is being given to the role of bacteria of the Campylobacter group since Skirrow presented evidence supporting their association with acute enteric disease in humans (B.M.J. July 2, 1977). Skirrow suggested that if the results of his survey were extrapolated, these organisms would represent the most common identifiable cause of infectious diarrhoea in Britain. This subject was discussed in recent editions of the Canada Diseases Weekly Report.

Campylobacters, which are closely related to the vibrios, are very small, highly motile gram-negative bacilli, showing few slightly curved or S-shaped rods. After overnight incubation in microaerophilic conditions, the growth may be diffuse with droplet-like colonies. The two species of clinical importance are C. jejuni and C. coli.

The Bulletin is compiled and distributed by the Environmental Health Branch, Department of Health, P.O. Box 100, Woden, A.C.T. 2606, Australia, and is available on request. Contributions are solicited, and do not preclude later publication elsewhere. Material appearing in the Bulletin may be quoted provided suitable acknowledgement is made.

The highest incidence of the disease caused by C. coli and C. jejuni is in young children, but all ages can be involved. Adults seem to be affected more severely than children and in some studies a predilection for the debilitated adult has been observed.

Symptoms may include abdominal cramps, profuse diarrhoea of sudden onset and fever. The stools may contain purulent mucus, blood and bile and are characteristically foul-smelling. The acute phase may last from 1 to 3 days; however, semi-formed stools may be passed for longer periods of time.

The disease can be acquired in some cases by direct person-to-person contact or by contact with animals. In some patients chicken, beef or milk appear to have been the source of infection. Occasionally, dogs with diarrhoea have yielded the same organisms as the patients/owners. Acquisition of the disease by groups of travellers, indicated food and water as a possible source of infection.

The infrequent isolation of C. coli and C. jejuni has been attributed to the inadequate techniques of isolation Skirrow used Oxoid B.A. base No. 2 to which the following are added aseptically: lysed horse blood (7%); vancomycin (10mg/l); trimethoprim (5mg/l); polymixin B (2500 I.U./l). Light faecal suspensions are inoculated directly and spread in the normal manner. The plates are incubated in an anaerobic jar (without catalyst) containing a mixture of 5% oxygen, 10% carbon dioxide and 85% nitrogen.

The campylobacters are sensitive in vitro to macrolide and aminoglycoside antibiotics, only partially sensitive to ampicillin, and resistant to penicillin.

CONTRIBUTIONS TO BULLETIN

Throughout 1977, the vast majority of articles in C.D.I. which were not written by the editorial staff were supplied by those laboratories contributing data on virus isolates. Very few contributions were received from other sources.

Contributions are solicited from those people involved in the field of infectious disease in Australia. Notes for publication can include interesting clinical case histories, information on local food poisoning outbreaks or local outbreaks of an infection (such as hepatitis), or news of important developments in either the fields of microbiology or public health control. Articles should be sent to the address on the cover sheet.

AUSTRAL● - COMMUNICABLE DISEASES INTEL●GENCE

REPORTING PERIOD - 29.12.77 to 11.1.78 BULLETIN NUMBER .78/1

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.....	-	-	-	-	-	-	2	5	7
0101 ADENOVIRUS TYPE 1.....	-	-	-	-	-	1	-	1	2
0102 ADENOVIRUS TYPE 2.....	-	-	-	-	-	2	-	5	7
0103 ADENOVIRUS TYPE 3.....	-	-	-	-	-	1	-	-	1
0107 ADENOVIRUS TYPE 7.....	-	-	-	-	-	-	-	2	2
0108 ADENOVIRUS TYPE 8.....	-	-	-	1	-	-	-	-	1
0119 ADENOVIRUS TYPE 19.....	-	-	-	-	-	-	-	1	1
0199 ADENOVIRUS TYPING PENDING.....	-	-	-	-	2	5	2	-	9
0201 INFLUENZA A VIRUS.....	1	-	-	-	-	-	-	6	7
0203 INFLUENZA B VIRUS.....	1	-	-	3	1	-	-	-	5
0301 PARAINFLUENZA VIRUS TYPE 1.....	-	-	-	-	-	1	2	3	6
0302 PARAINFLUENZA VIRUS TYPE 2.....	-	-	-	-	-	-	-	1	1
0303 PARAINFLUENZA VIRUS TYPE 3.....	3	-	-	3	1	4	7	3	21
0399 PARAINFLUENZA VIRUS TYPING PENDING.	1	-	-	-	-	1	-	-	2
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)...	-	-	-	-	-	-	-	4	4
0500 RHINOVIRUS (ALL TYPES).....	-	-	-	5	4	-	-	3	12
0600 MYCOPLASMA PNEUMONIAE.....	8	1	-	4	-	1	1	9	24
0700 ORNITHOSIS-PSITTACOSIS.....	-	-	-	-	-	-	-	1	1
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....	-	-	-	-	-	-	1	-	1
0816 COXSACKIEVIRUS A16.....	-	-	-	-	-	-	2	-	2
0903 COXSACKIEVIRUS B3.....	-	-	-	-	-	-	2	-	2
1006 ECHOVIRUS TYPE 6.....	-	-	-	1	-	-	-	-	1
1007 ECHOVIRUS TYPE 7.....	-	-	-	1	-	-	-	-	1
1009 ECHOVIRUS TYPE 9.....	-	-	-	2	-	1	5	-	8
1011 ECHOVIRUS TYPE 11.....	-	-	-	-	-	6	-	-	6
1015 ECHOVIRUS TYPE 15.....	-	-	-	-	-	-	-	3	3
1017 ECHOVIRUS TYPE 17.....	-	-	-	2	-	-	-	-	2
1021 ECHOVIRUS TYPE 21.....	1	-	-	-	-	-	-	-	1
1022 ECHOVIRUS TYPE 22.....	-	-	2	-	-	-	-	-	2
1024 ECHOVIRUS TYPE 24.....	-	-	-	-	-	-	-	1	1
1099 ECHOVIRUS TYPING PENDING.....	-	-	-	-	-	8	-	-	8
1102 POLIOVIRUS TYPE 2.....	-	-	-	-	-	1	-	-	1
1103 POLIOVIRUS TYPE 3.....	-	-	-	-	-	5	-	-	5
1200 MUMPS VIRUS.....	-	-	-	1	1	2	5	1	10

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VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES - CONTINUED

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
1300 HERPES VIRUS GROUP-NOT TYPED.....	3	-	-	1	-	-	-	2	6
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	15	1	5	-	6	-	17	1	45
1303 VARICELLA-ZOSTER VIRUS.....	1	-	-	2	-	-	2	4	9
1306 HERPES SIMPLEX TYPE 1.....	1	-	-	7	-	5	-	-	13
1307 HERPES SIMPLEX TYPE 2.....	15	-	-	7	-	8	-	5	35
1401 COXIELLA BURNETI.....	7	-	-	1	-	1	8	-	17
1514 MOLLUSCUM CONTAGIOSUM.....	-	-	-	-	-	-	-	1	1
1521 MEASLES VIRUS.....	2	-	-	1	-	1	-	-	4
1522 RUBELLA VIRUS.....	-	-	-	5	-	2	-	-	7
1532 HEPATITIS B ANTIGEN.....	3	-	9	25	-	7	14	8	66
1533 HEPATITIS B ANTIBODY.....	-	-	-	-	-	52	11	15	78
1541 TRIC - TRACHOMA-INCLUSION CONJUNCTIVITIS.....	-	-	-	-	-	1	-	11	12
1556 CMV - CYTOMEGALOVIRUS.....	1	-	-	-	1	2	3	9	16
1562 REOVIRUS (ALL TYPES).....	-	-	-	-	-	-	-	1	1
1564 ROTAVIRUS.....	2	-	-	1	-	-	-	1	4
1599 ENTEROVIRUS TYPING PENDING.....	3	4	-	-	4	-	-	-	11
TOTAL.....	68	6	16	73	20	118	84	107	492
Ross River Virus								1	1

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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	3	3	1	-	-	-	-	-	-	-	7
0101 ADENOVIRUS TYPE 1	2	-	-	-	-	-	-	-	-	-	2
0102 ADENOVIRUS TYPE 2	5	-	3	-	-	-	-	-	-	-	8
0103 ADENOVIRUS TYPE 3	-	-	-	-	-	1	-	-	-	-	1
0107 ADENOVIRUS TYPE 7	-	-	2	-	-	-	-	-	-	-	2
0108 ADENOVIRUS TYPE 8	-	-	-	-	-	1	-	-	-	-	1
0119 ADENOVIRUS TYPE 19	-	-	-	-	-	1	-	-	-	-	1
0199 ADENOVIRUS TYPING PENDING	6	-	2	-	-	-	1	-	-	-	9
0201 INFLUENZA A VIRUS	-	7	-	-	-	-	-	-	-	-	7
0203 INFLUENZA B VIRUS	-	-	5	-	-	-	-	-	-	-	5
0301 PARAINFLUENZA VIRUS TYPE 1	-	-	6	-	-	-	-	-	-	-	6
0302 PARAINFLUENZA VIRUS TYPE 2	-	1	-	-	-	-	-	-	-	-	1
0303 PARAINFLUENZA VIRUS TYPE 3	-	3	18	-	-	-	-	-	-	-	21
0399 PARAINFLUENZA VIRUS TYPING PENDING	-	-	2	-	-	-	-	-	-	-	2
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	-	2	2	-	-	-	-	-	-	-	4
0500 RHINOVIRUS (ALL TYPES)	-	-	12	-	-	-	-	-	-	-	12
0600 MYCOPLASMA PNEUMONIAE	-	24	-	-	-	-	-	-	-	-	24
0700 ORNITHOSIS-PSITTACOSIS	-	1	-	-	-	-	-	-	-	-	1
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED	1	-	-	-	-	-	-	-	-	-	1
0816 COXSACKIEVIRUS A16	-	-	1	-	2	-	-	-	-	-	3
0903 COXSACKIEVIRUS B3	1	-	1	-	-	-	-	-	-	-	2
1006 ECHOVIRUS TYPE 6	-	-	1	-	-	-	-	-	-	-	1
1007 ECHOVIRUS TYPE 7	1	-	-	-	-	-	-	-	-	-	1
1009 ECHOVIRUS TYPE 9	-	-	5	4	-	-	-	-	-	-	9
1011 ECHOVIRUS TYPE 11	4	-	2	-	-	-	-	-	-	-	6
1015 ECHOVIRUS TYPE 15	2	-	-	1	-	-	-	-	-	-	3
1017 ECHOVIRUS TYPE 17	2	-	-	1	-	-	-	-	-	-	3
1021 ECHOVIRUS TYPE 21	-	-	1	-	-	-	-	-	-	-	1
1022 ECHOVIRUS TYPE 22	2	-	-	-	-	-	-	-	-	-	2
1024 ECHOVIRUS TYPE 24	1	-	-	-	-	-	-	-	-	-	1
1099 ECHOVIRUS TYPING PENDING	4	-	2	2	-	-	-	-	-	-	8
1102 POLIOVIRUS TYPE 2	1	-	-	-	-	-	-	-	-	-	1
1103 POLIOVIRUS TYPE 3	5	-	-	-	-	-	-	-	-	-	5
1200 MUMPS VIRUS	-	5	2	4	-	-	-	-	-	-	11
1300 HERPES VIRUS GROUP-NOT TYPED	-	5	-	-	1	-	-	-	-	-	6

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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
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	-	3	18	-	7	-	-	-	13	4	45
1303 VARICELLA-ZOSTER VIRUS.....	-	6	-	-	3	-	-	-	-	-	9
1306 HERPES SIMPLEX TYPE 1.....	-	-	4	-	5	-	-	-	3	1	13
1307 HERPES SIMPLEX TYPE 2.....	-	-	-	-	8	-	-	-	29	-	37
1401 COXIELLA BURNETI.....	-	17	-	-	-	-	-	-	-	-	17
1514 MOLLUSCUM CONTAGIOSUM.....	-	-	-	-	1	-	-	-	-	-	1
1521 MEASLES VIRUS.....	-	4	-	-	-	-	-	-	-	-	4
1522 RUBELLA VIRUS.....	-	6	-	-	-	-	-	-	-	1	7
1532 HEPATITIS B ANTIGEN.....	-	66	-	-	-	-	-	-	-	-	66
1533 HEPATITIS B ANTIBODY.....	-	78	-	-	-	-	-	-	-	-	78
1541 TRIC - TRACHOMA-INCLUSION CONJUNCTIVITIS.....	-	-	-	-	-	-	-	-	12	-	12
1556 CMV - CYTOMEGALOVIRUS.....	-	4	2	-	-	-	3	-	7	-	16
1562 REOVIRUS (ALL TYPES).....	-	1	-	-	-	-	-	-	-	-	1
1564 ROTAVIRUS.....	4	-	-	-	-	-	-	-	-	-	4
1599 ENTEROVIRUS TYPING PENDING.....	1	-	6	4	-	-	-	-	-	-	11
TOTAL.....	45	236	98	16	27	3	4	-	64	6	499

Ross River Virus	1	1

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 12 Jan '78 to 25 Jan '78 BULLETIN NUMBER 02/78

VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS - CONTINUED

	VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
1103	POLIOVIRUS TYPE 3	-	1	-	-	-	-	-	-	-	-	1
1200	MUMPS VIRUS	-	9	7	7	-	-	1	-	-	-	24
1300	HERPES VIRUS GROUP-NOT TYPED	-	1	-	-	7	-	-	-	1	-	9
1301	HERPES SIMPLEX VIRUS-NOT TYPED	-	8	8	1	8	-	-	-	13	-	38
1303	VARICELLA-ZOSTER VIRUS	-	6	-	-	1	-	-	-	-	-	7
1306	HERPES SIMPLEX TYPE 1	-	-	10	1	16	4	-	-	3	-	34
1307	HERPES SIMPLEX TYPE 2	-	-	-	-	14	-	-	-	31	-	45
1399	HERPES VIRUS TYPING PENDING	-	-	-	-	1	-	-	-	-	1	2
1401	COXIELLA BURNETI	-	18	-	-	-	-	-	-	-	-	18
1521	MEASLES VIRUS	-	2	2	-	-	-	-	-	-	-	4
1522	RUBELLA VIRUS	-	7	1	-	-	-	-	-	-	-	8
1532	HEPATITIS B ANTIGEN	-	76	-	1	-	-	-	-	-	-	77
1533	HEPATITIS B ANTIBODY	-	65	-	-	-	-	-	-	-	-	65
1535	HEPATITIS A ANTIBODY	-	1	-	-	-	-	-	-	-	-	1
1541	TRIC - TRACHOMA-INCLUSION CONJUNCTIVITIS	-	-	-	-	-	-	-	-	11	-	11
1556	CMV - CYTOMEGALOVIRUS	-	5	7	-	-	-	7	-	5	1	25
1564	ROTAVIRUS	11	-	-	-	-	-	-	-	-	-	11
1599	ENTEROVIRUS TYPING PENDING	7	-	6	3	-	-	-	-	-	-	16
TOTAL		52	263	111	34	49	6	9	-	64	4	592

Ross River Virus 1 1

AMENDED SOURCE SPECIMENS TABLE FOR BULLETIN 02/78.

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VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS

	VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	FY	UR	BR	GE	OT	TOTAL
0100	ADENOVIRUS NOT TYPED	3	4	4	-	-	-	-	-	-	-	11
0101	ADENOVIRUS TYPE 1	2	-	-	-	-	-	-	-	-	-	2
0102	ADENOVIRUS TYPE 2	4	-	1	-	-	-	-	-	-	1	6
0105	ADENOVIRUS TYPE 5	2	-	-	-	-	-	-	-	-	-	2
0107	ADENOVIRUS TYPE 7	1	-	-	-	-	1	-	-	-	-	2
0126	ADENOVIRUS TYPE 26	-	-	-	-	-	1	-	-	-	-	1
0199	ADENOVIRUS TYPING PENDING	2	-	4	-	-	-	-	-	-	-	6
0201	INFLUENZA A VIRUS	-	7	-	-	-	-	-	-	-	-	7
0202	INFLUENZA A VIRUS SUBTYPE H3N2	-	4	-	-	-	-	-	-	-	-	4
0203	INFLUENZA B VIRUS	-	-	3	-	-	-	-	-	-	-	3
0301	PARAINFLUENZA VIRUS TYPE 1	-	-	2	-	-	-	-	-	-	-	2
0302	PARAINFLUENZA VIRUS TYPE 2	-	3	1	-	-	-	-	-	-	-	4
0303	PARAINFLUENZA VIRUS TYPE 3	-	1	10	-	-	-	-	-	-	-	11
0400	RESPIRATORY SYNCYTIAL VIRUS (RS)	-	1	3	-	-	-	-	-	-	-	4
0500	RHINOVIRUS (ALL TYPES)	-	-	10	-	-	-	-	-	-	-	10
0600	MYCOPLASMA PNEUMONIAE	-	35	-	-	-	-	-	-	-	-	35
0700	ORNITHOSIS-PSITTACOSIS	-	9	-	-	-	-	-	-	-	-	9
0800	COXSACKIEVIRUSES GROUP A - NOT TYPED	3	-	-	-	-	-	-	-	-	-	3
0809	COXSACKIEVIRUS A9	-	-	1	2	-	-	-	-	-	-	3
0816	COXSACKIEVIRUS A16	-	-	1	-	1	-	-	-	-	-	2
0901	COXSACKIEVIRUS B1	1	-	6	-	1	-	-	-	-	-	8
0902	COXSACKIEVIRUS B2	1	-	3	-	-	-	-	-	-	-	4
0905	COXSACKIEVIRUS B5	-	-	2	-	-	-	-	-	-	-	2
1000	ECHOVIRUS NOT TYPED	1	-	3	-	-	-	-	-	-	-	4
1007	ECHOVIRUS TYPE 7	-	-	1	1	-	-	-	-	-	-	2
1009	ECHOVIRUS TYPE 9	7	-	10	8	-	-	-	-	-	-	25
1011	ECHOVIRUS TYPE 11	1	-	1	2	-	-	-	-	-	-	4
1017	ECHOVIRUS TYPE 17	-	-	-	2	-	-	-	-	-	-	2
1018	ECHOVIRUS TYPE 18	1	-	-	1	-	-	-	-	-	-	2
1021	ECHOVIRUS TYPE 21	-	-	1	2	-	-	-	-	-	-	3
1022	ECHOVIRUS TYPE 22	2	-	1	1	-	-	-	-	-	-	4
1025	ECHOVIRUS TYPE 25	1	-	-	-	-	-	-	-	-	-	1
1030	ECHOVIRUS TYPE 30	1	-	1	1	-	-	-	-	-	-	3
1099	ECHOVIRUS TYPING PENDING	-	-	-	1	-	-	-	-	-	-	1
1102	POLIOVIRUS TYPE 2	1	-	1	-	-	-	1	-	-	1	4