

# INFECTIOUS DISEASES – JANUARY-FEBRUARY 1998

## TRENDS

Notifications of **arboviral infection** and **measles** have remained relatively low this summer (Figure 1). In contrast, notifications of **cryptosporidiosis** have risen sharply (see below) and **pertussis** continues to be a major problem (see the December *Public Health Bulletin*). Notifications of **hepatitis A** continue at a higher rate than in previous years, with 142 cases being reported in January across the State (Table 1). Many cases are among residents of the Northern Rivers and South Eastern Sydney Areas, and person-to-person transmission appears to be the prominent source of infection.

## CRYPTOSPORIDIOSIS ON THE RISE IN NSW

Notifications of cryptosporidiosis cases have increased in NSW since late November. This disease is caused by ingestion of a parasite (*Cryptosporidium parvum*) and is characterised by abdominal cramps and frequent watery diarrhoea. There is no specific treatment for the disease, and the infection usually resolves after several days.

For immunocompromised people the illness can become chronic and debilitating.

The disease is very infectious and is easily spread from person to person. The infectious form of the parasite is the oocyst. The oocyst's small diameter (4 to 6 µm) and high level of chlorine resistance allows it to survive in treated water. Several large outbreaks of cryptosporidiosis have been reported around the world, and have been linked to drinking contaminated water or swimming in contaminated pools. Smaller outbreaks have been related to contact with infected animals and contact with infected children in child care.

In NSW cryptosporidiosis became a reportable infectious disease in December 1996. Since then a handful of cases has been reported each month until November 1997. In recent weeks an outbreak of cryptosporidiosis in Canberra has been traced by the Australian Capital Territory Department of Health and Community Care to a contaminated swimming pool in Canberra. In February all NSW Public Health Units were asked urgently to investigate cryptosporidiosis cases reported from their Areas using a specifically designed questionnaire. Three Public Health Officer trainees were seconded to assist in the investigation.

By February 23, questionnaires exploring possible risk factors were completed and analysed for 169 people with cryptosporidiosis. Of these, onset was known for 162; these included three in late November, 48 in December, 74 in January and so far 37 in February. Of those for whom sex was known, 53 per cent (89) were female; ages ranged from under one year to 77 years (median four years). Areas of residence included South Western Sydney (31), Western Sydney (22), New England (18), Southern (14), North Rivers (14), Wentworth (12), South Eastern Sydney (11), Central Sydney (10), Mid North Coast (10), Greater Murray (9), Macquarie (8), Hunter, Illawarra, and Mid Western (each with five or fewer). Fifty-three cases (33 per cent) were admitted to hospital for treatment.

During the two weeks preceding the onset of their illness, 21 per cent reported contact with child care centres, 9 per cent with farm animals, 14 per cent with pets, 29 per cent reported travel out of their Area, but to a wide variety of places (only six to Canberra), 18 per cent reported eating out, 51 per cent reported contact with other people with diarrhoea, and 61 per cent reported swimming (but at a variety of pools and beaches across the State). Extensive reinterviewing of 23 cases identified no other risks for diseases.

Because *Cryptosporidium* oocysts may not be removed by filtration or destroyed by chlorination, prevention of pool contamination is an important control measure. On February 14, the NSW Health Department issued a press release warning the public of the increase in cryptosporidiosis cases in NSW; that the infection is spread easily from person to person, but may also contaminate swimming pools; and recommending that people with diarrhoea practise good hand washing, stay out of child care, and avoid entering swimming pools until completely recovered.

## TWO CASES OF TETANUS

In January, two adults (a 68-year-old woman and a 69-year-old man) with tetanus were reported in NSW. Neither case was up-to-date with tetanus immunisations. Along with personal suffering, both cases endured prolonged and expensive hospital care. These cases highlight the importance of adult immunisation. The NHMRC recommends adults get a booster dose of tetanus and diphtheria vaccine every 10 years.

## PUBLIC HEALTH EDITORIAL STAFF

The editor of the *NSW Public Health Bulletin* is Dr Michael Frommer, Director, Centre for Research and Development, NSW Health Department. Dr Lynne Madden is production manager.

The *Bulletin* aims to provide its readers with population health data and information to motivate effective public health action.

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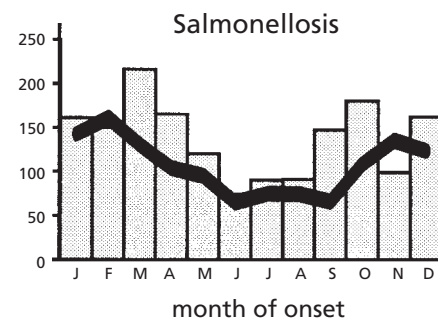
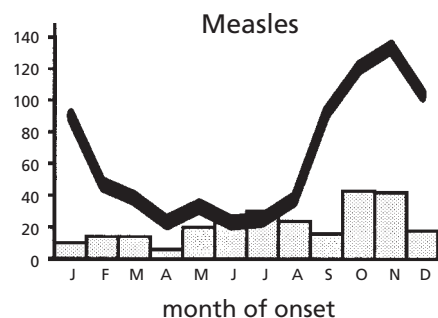
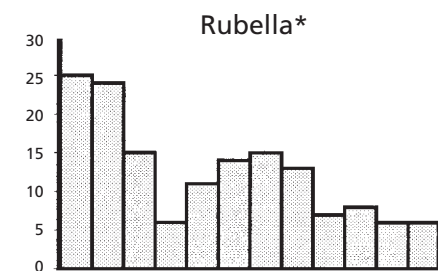
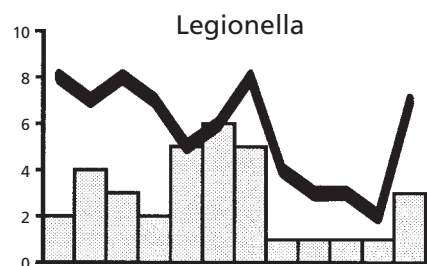
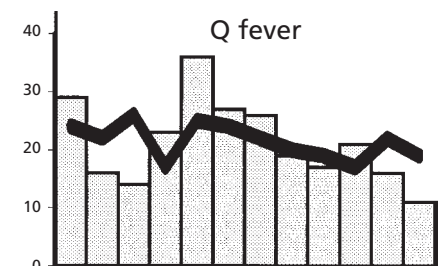
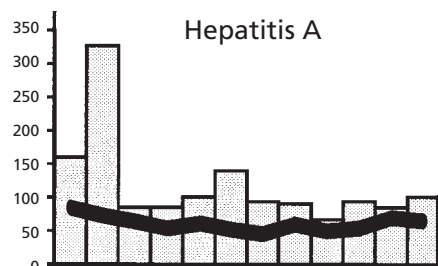
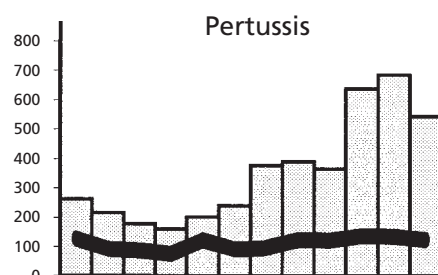
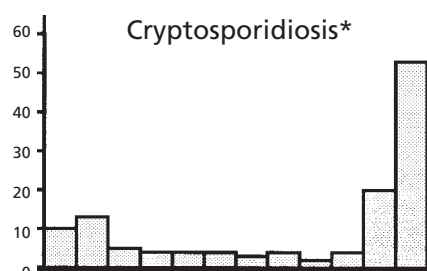
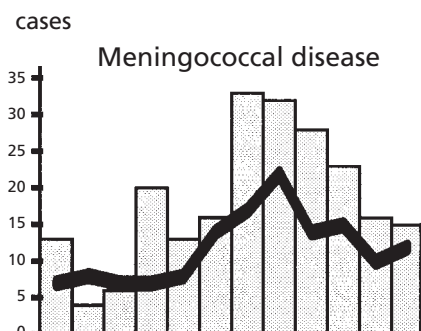
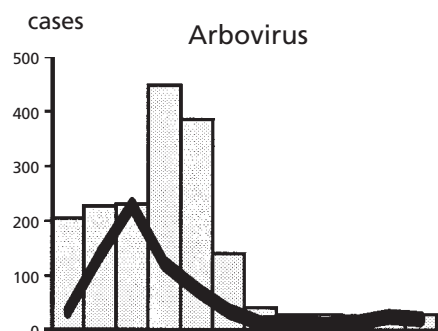
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REPORTS OF SELECTED INFECTIOUS DISEASES, NSW, 12 MONTHS TO  
DECEMBER 1997, BY MONTH OF ONSET (WITH HISTORICAL COMPARISON)



\* Historic figures unavailable.

Jan 97 - Dec 97

Mean Jan 94 - Dec 96

TABLE 1

INFECTIOUS DISEASE NOTIFICATIONS FOR NSW RECEIVED IN DECEMBER 1997 BY AREA HEALTH SERVICES

Condition	Area Health Service																	Period	
	CSA	NSA	WSA	WEN	SWS	CCA	HUN	ILL	SES	NRA	MNC	NEA	MAC	MWA	FWA	GMA	SA	Total for Dec**	Total to date**
<b>Blood-borne and sexually transmitted</b>																			
AIDS	2	2	1	–	2	–	1	–	3	–	–	–	–	–	–	–	1	12	271
HIV infection*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	211
Hepatitis B – acute viral*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	50
Hepatitis B – other*	43	32	10	5	46	5	3	2	35	–	2	6	–	1	–	2	3	179	3,834
Hepatitis C – acute viral*	4	1	1	–	1	–	–	–	–	–	1	–	–	1	–	–	–	9	21
Hepatitis C – other*	71	35	51	38	43	40	36	16	99	31	9	11	5	27	–	8	7	427	8,416
Hepatitis D – unspecified*	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1	12
Hepatitis, acute viral (NOS)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Gonorrhoea*	5	3	2	–	–	–	–	1	19	–	–	1	3	2	–	–	–	36	624
Syphilis	5	3	2	1	2	1	1	1	19	–	–	4	1	–	–	–	–	40	570
<b>Vector-borne</b>																			
Arboviral infection*	–	2	2	–	–	–	4	1	1	3	6	1	7	1	–	10	–	38	1,829
Malaria*	–	3	–	–	–	–	3	1	5	–	–	–	–	–	–	–	–	12	168
<b>Zoonoses</b>																			
Brucellosis*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
Leptospirosis*	–	–	–	–	–	–	2	–	–	–	–	1	–	–	–	–	–	3	35
Q fever*	–	–	–	–	–	3	–	–	1	4	3	–	4	–	–	3	–	18	262
<b>Respiratory/other</b>																			
Blood Lead Level	1	1	–	–	–	2	9	–	1	–	–	–	–	–	1	1	–	16	110
Legionnaires' disease	1	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	3	34
Leprosy	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Meningococcal (invasive) infection	1	3	4	2	1	–	2	1	1	–	–	–	1	–	–	–	–	16	220
Mycobacterial tuberculosis	2	1	2	–	5	3	1	1	7	–	–	–	–	–	–	–	–	22	426
Mycobacteria other than TB	2	6	–	–	3	1	2	–	–	–	–	1	–	–	–	–	1	16	416
<b>Vaccine-preventable</b>																			
Adverse event after immunisation	–	–	–	1	–	–	–	–	6	–	5	5	–	–	–	1	–	18	102
<i>H. influenzae</i> B (invasive) infection	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	18
Measles	1	2	2	–	4	1	5	–	–	–	2	–	–	–	1	1	1	20	262
Mumps*	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1	29
Pertussis	47	61	99	54	68	21	40	35	74	12	19	18	5	9	1	5	10	578	4,286
Rubella*	–	1	–	–	–	1	–	–	5	–	–	–	–	–	–	–	–	7	151
Tetanus	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	1	3
<b>Faecal-oral</b>																			
Botulism	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cholera*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Cryptosporidiosis	1	–	11	–	3	–	5	1	–	1	9	8	7	1	–	9	5	61	133
Foodborne illness (NOS)	12	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	13	168
Gastroenteritis (insti)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	966
Haemolytic Uraemic Syndrome	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	1	3
Hepatitis A	18	6	9	–	7	7	14	–	12	22	4	5	7	–	1	1	2	115	1,444
Hepatitis E	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
Listeriosis*	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	2	22
Salmonellosis (NOS)*	12	22	–	–	22	8	24	11	36	8	7	10	7	5	2	6	2	182	1,675
Typhoid and paratyphoid*	–	3	–	–	1	–	1	–	–	–	–	–	–	–	–	1	–	6	28
Verotoxin Producing Ecoli	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

\* lab-confirmed cases only

\*\* includes cases with unknown postcode

Abbreviations used in this Bulletin:

CSA Central Sydney Health Area, SES South Eastern Sydney Health Area, SWS South Western Sydney Health Area, WSA Western Sydney Health Area, WEN Wentworth Health Area, NSA Northern Sydney Health Area, CCA Central Coast Health Area, ILL Illawarra Health Area, HUN Hunter Health Area, NRA Northern Rivers Health Area, MNC Mid North Coast Health Area, NEA New England Health Area, MAC Macquarie Health Area, MWA Mid West Health Area, FWA Far West Health Area, GMA Greater Murray Health Area, SA Southern Health Area, OTH Interstate/Overseas, U/K Unknown, NOS Not Otherwise Stated.

TABLE 2

INFECTIOUS DISEASE NOTIFICATIONS FOR NSW RECEIVED IN JANUARY 1998 BY AREA HEALTH SERVICES

Condition	Area Health Service (1998)																	Period	
	CSA	NSA	WSA	WEN	SWS	CCA	HUN	ILL	SES	NRA	MNC	NEA	MAC	MWA	FWA	GMA	SA	Total for Jan**	Total to date**
<b>Blood-borne and sexually transmitted</b>																			
AIDS	1	1	-	-	-	1	-	-	1	-	-	-	-	-	1	-	-	5	5
HIV infection*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hepatitis B – acute viral*	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	3	3
Hepatitis B – other*	46	49	5	2	29	11	8	2	24	1	1	3	2	2	1	-	1	187	187
Hepatitis C – acute viral*	-	1	-	-	-	-	2	-	-	-	1	-	1	-	-	-	-	5	5
Hepatitis C – other*	80	30	79	29	22	35	26	17	60	37	13	7	2	32	2	9	40	520	520
Hepatitis D – unspecified*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hepatitis, acute viral (NOS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gonorrhoea*	12	3	6	1	-	-	4	1	28	1	6	1	-	-	1	-	1	65	65
Syphilis	6	-	8	1	4	1	-	-	11	2	-	2	1	1	1	1	-	39	39
<b>Vector-borne</b>																			
Arboviral infection*	2	5	-	-	-	-	3	3	-	5	1	3	6	3	-	9	4	44	44
Malaria*	2	6	-	-	1	-	3	1	1	-	-	-	-	-	-	-	1	15	15
<b>Zoonoses</b>																			
Brucellosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1
Q fever*	-	1	-	-	-	2	-	-	-	4	1	-	8	1	1	-	3	21	21
<b>Respiratory/other</b>																			
Blood Lead Level	3	3	-	-	3	2	9	-	-	-	-	1	-	-	1	-	1	23	23
Legionnaires' disease	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal (invasive) infection	-	1	3	2	-	-	-	-	-	-	1	1	1	-	1	-	-	10	10
Mycobacterial tuberculosis	1	5	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	10	10
Mycobacteria other than TB	3	2	1	-	1	-	1	-	-	2	-	-	-	-	-	-	1	11	11
<b>Vaccine-preventable</b>																			
Adverse event after immunisation	1	-	1	-	-	-	-	-	2	-	4	2	-	2	-	1	1	14	14
<i>H.influenzae</i> B (invasive) infection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	2	1	3	1	-	-	-	1	-	-	-	-	-	-	1	9	9
Mumps*	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
Pertussis	26	37	27	19	25	16	30	26	31	20	18	16	7	9	1	3	1	312	312
Rubella*	-	-	-	-	-	2	1	1	-	-	-	-	-	-	-	-	-	4	4
Tetanus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
<b>Faecal-oral</b>																			
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera*	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Cryptosporidiosis	4	5	14	-	17	-	10	3	8	3	2	6	9	-	-	3	5	89	89
Foodborne illness (NOS)	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	3	3
Gastroenteritis (instit)	13	-	-	-	1	-	12	-	-	-	-	-	-	-	-	-	-	26	26
Haemolytic Uraemic Syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1
Hepatitis A	9	11	11	2	6	3	14	3	37	30	9	5	1	-	-	-	1	142	142
Hepatitis E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Listeriosis*	1	-	-	-	2	-	-	3	-	-	-	-	-	-	-	-	-	6	6
Salmonellosis (NOS)*	15	26	-	-	16	19	15	8	13	18	7	8	5	6	6	4	4	169	169
Typhoid and paratyphoid*	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	2
Verotoxin Producing Ecoli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* lab-confirmed cases only

\*\* includes cases with unknown postcode

Please note that the data contained in this Bulletin are provisional and subject to change because of late reports or changes in case classification. Data are tabulated where possible by area of residence and by the disease onset date and not simply the date of notification or receipt of such notification.