

## COMMUNICABLE DISEASES, NSW: SEPTEMBER–OCTOBER 2000

### TRENDS

#### Pertussis on the rise

There has been a recent increase in reports of pertussis (whooping cough) in NSW. Pertussis typically begins with a runny nose, sore eyes, malaise and low-grade fever, and evolves into classic whooping cough. Coughing occurs in paroxysms that include short expiratory bursts followed by an inspiratory gasp that can result in the typical whoop. The disease is most severe in small children. Some of the symptoms may be absent, especially in older cases. Pertussis is most infectious early in the disease, spread by aerosol droplets from infected children or adults. Diagnosis depends on clinical suspicion, and laboratory isolation of *Bordetella pertussis* by nasopharyngeal culture, or antibodies in persons with symptoms.

To late July, 233 cases had been reported for June 2000, compared with 104 in June 1999, 101 in June 1998, and 233 in June 1997 (the year of the last epidemic in NSW). A total of 1,015 cases have been reported so far this year, compared with 1,414 for the whole of 1999, 2,312 in 1998, and 4,251 in 1997. No deaths have been reported so far this year.

Pertussis is currently affecting a larger proportion of adults than in previous years. In the three months to 30 June 2000, five per cent of cases were aged under five years, 27 per cent aged 5–14 years, 18 per cent aged 15–29 years, and 50 per cent aged 30 years or more. During the whole of 1997, 12 per cent of cases were aged under five years, 42 per cent aged 5–14 years, 14 per cent aged 15–29 years, and 32 per cent aged 30 years or more.

In the three months to 30 June 2000, the highest number of reports of pertussis were in residents of the Hunter Health Service Area (163 cases, 29 per cent of all NSW cases), followed by the Western Sydney Area (57 cases, 10 per cent). The 1997 epidemic was more widespread, with 16 per cent of cases being reported from the Hunter Area, and 12 per cent being reported from each of the Western Sydney, South Western Sydney, and South Eastern Sydney Areas.

After taking population size into account, annualised rates of the disease in the three months to 30 June 2000 were highest in residents of the Hunter Area (121/100,000/year), followed by the Macquarie Area (73/100,000/year), and the New England and Greater Murray Areas (each approximately 67/100,000/year). For the whole of 1997, the highest rates were in residents of the Hunter Area (126/100,000/year), followed by the Wentworth Area (97/

100,000/year) and the Western Sydney Area (81/100,000/year).

To help prevent the further transmission of pertussis:

- All parents and doctors should ensure all children are fully immunised against pertussis (doses are due at two, four, six and 18 months, and at four years of age).
- Persons with symptoms of pertussis should seek medical diagnosis.
- Pertussis cases are infectious to others for up to three weeks after onset. Treatment with erythromycin given within three weeks of onset should render cases non-infectious after five days. While infectious, cases should not attend preschool or school (or other settings where there are susceptible persons, especially young children).
- Pertussis can be prevented among household contacts of infectious cases through treatment with erythromycin.
- The treatment of choice for cases and their household contacts is erythromycin 40 to 50 mg/kg per day in four divided doses up to one gram per day for 10 days.
- Doctors, laboratories and hospitals should notify suspected cases to the local public health unit.

#### Influenza

Laboratory diagnoses of influenza A increased in the last week of July. The virus strain isolated from cases has been predominantly H1N1 and not the A/Sydney (H3N2) strain of recent years. Influenza B isolates have remained few. Sentinel general practitioners report that clinical influenza-like illness among their patients increased slightly in late July. Little influenza activity has been reported from elsewhere in the Southern Hemisphere.

#### CHICKENPOX UPDATE

Since the publication of our Chickenpox *Factsheet* in the March 2000 *NSW Public Health Bulletin*, a new varicella vaccine has been licensed in Australia. While not on the Australian Standard Vaccination Schedule published by the National Health and Medical Research Council, the varicella vaccine is recommended for non-immune adolescents and adults. For more information, see the *Australian Immunisation Handbook*.<sup>1</sup>

#### Reference

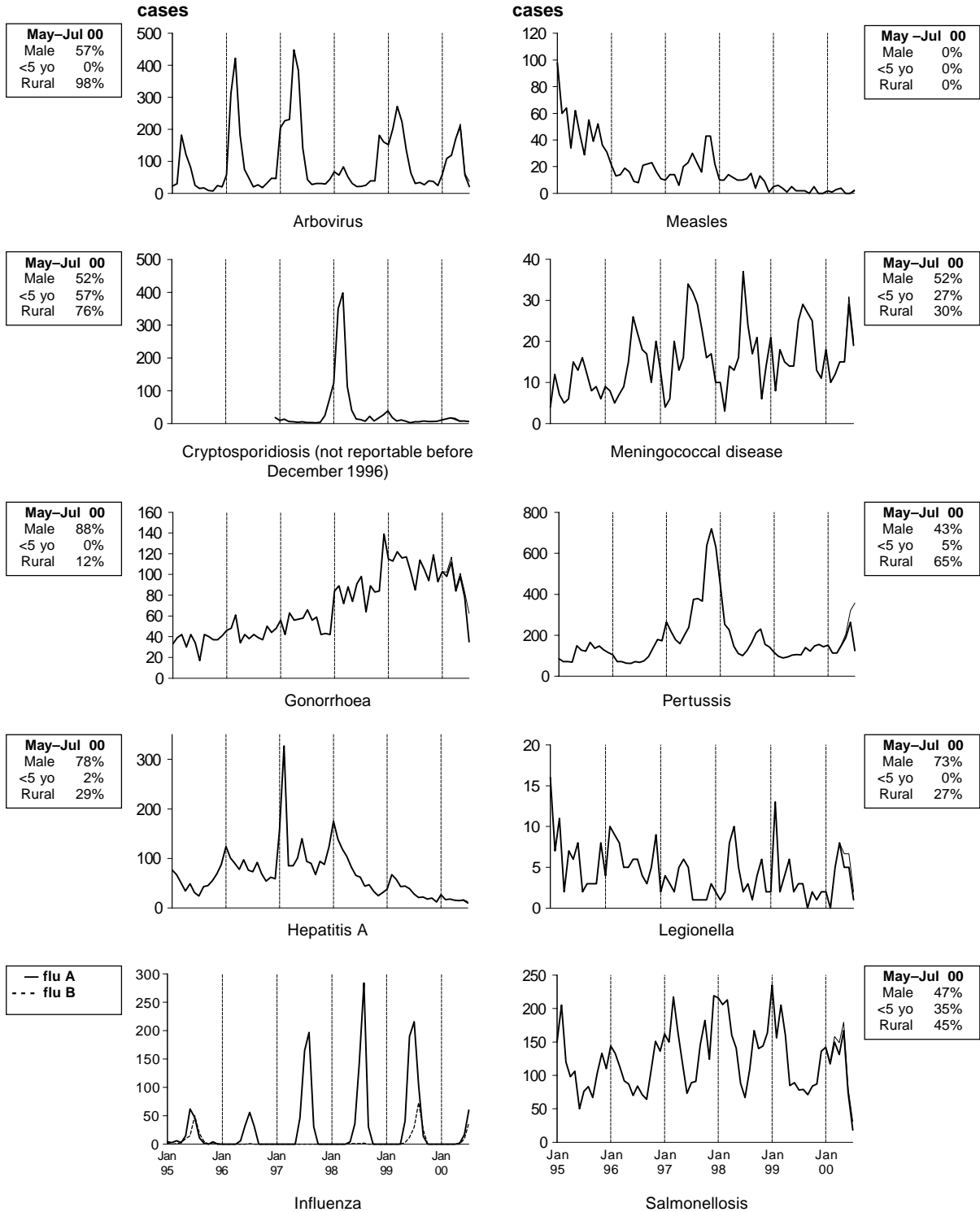
1. NHMRC. *Australian Immunisation Handbook*, 7th edition. Canberra: Commonwealth of Australia: March, 2000. ☒

**FIGURE 1**

**REPORTS OF SELECTED COMMUNICABLE DISEASES, NSW, JANUARY 1995 TO JULY 2000, BY MONTH OF ONSET**

These are preliminary data: case counts in recent months may increase because of reporting delays. Laboratory-confirmed cases, except for measles, meningococcal disease and pertussis — actual — predicted after adjusting for likely reporting delays

NSW population	
Male	50%
<5 yo	7%
Rural	42%



\* For definition, see *NSW Public Health Bulletin*, April 2000

TABLE 8

## REPORTS OF NOTIFIABLE CONDITIONS RECEIVED IN JULY 2000 BY AREA HEALTH SERVICES

Condition	Area Health Service (2000)																		Total	
	CSA	NSA	WSA	WEN	SWS	CCA	HUN	ILL	SES	NRA	MNC	NEA	MAC	MWA	FWA	GMA	SA	CHS	for July†	To date†
<b>Blood-borne and sexually transmitted</b>																				
AIDS	3	-	-	-	-	-	-	-	5	1	-	-	-	-	-	-	-	-	9	76
HIV infection*	-	-	-	-	-	-	-	Reported every two months			-	-	-	-	-	-	-	-	-	90
Hepatitis B - acute viral*	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	46
Hepatitis B - other*	46	26	47	7	9	2	6	3	28	5	1	5	-	1	4	2	-	12	204	2,349
Hepatitis C - acute viral*	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	2	52
Hepatitis C - other*	54	19	62	34	3	12	34	23	63	34	30	6	4	14	6	14	12	69	498	4,911
Hepatitis D - unspecified*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	3
Hepatitis, acute viral (not otherwise specified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chancroid*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlamydia (genital)*	42	20	23	8	1	1	31	4	44	15	8	9	4	8	2	12	6	3	244	1,661
Gonorrhoea*	19	2	4	-	-	1	-	-	28	3	-	3	-	2	-	1	1	-	65	672
Syphilis	11	4	6	-	2	-	-	1	21	4	2	3	-	1	7	-	-	-	62	307
<b>Vector-borne</b>																				
Arboviral infection (BFV)*	-	-	-	-	-	-	2	1	-	-	8	-	-	-	1	-	-	-	12	128
Arboviral infection (RRV)*	-	1	-	-	-	-	12	-	-	3	8	-	2	4	6	2	-	-	38	615
Arboviral infection (Other)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24
Malaria*	-	-	-	1	-	-	1	1	-	-	-	2	-	-	-	1	1	-	7	135
<b>Zoonoses</b>																				
Brucellosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Leptospirosis*	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	31
Q fever*	-	1	-	-	-	-	-	-	-	1	1	-	1	1	-	-	-	-	5	60
<b>Respiratory and other</b>																				
Blood lead level*	9	2	2	14	-	-	2	2	2	-	-	-	2	-	-	1	-	-	36	758
Legionnaires' Longbeachae*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Legionnaires' Pneumophila*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
Legionnaires' (Other)*	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	3
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infection (invasive)	2	2	2	1	4	1	2	1	7	-	1	-	1	-	1	-	-	-	25	121
Mycobacterial tuberculosis	2	5	1	1	2	-	4	2	5	1	1	-	-	-	-	-	-	-	24	218
Mycobacteria other than TB	4	10	-	1	-	1	1	-	2	3	-	1	-	3	-	4	-	-	30	216
<b>Vaccine-preventable</b>																				
Adverse event after immunisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	6
H.influenzae b infection (invasive)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Measles	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	12
Mumps*	-	-	3	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	6	56
Pertussis	8	12	31	19	19	4	120	8	6	2	5	9	18	7	-	46	10	-	324	1,252
Rubella*	-	1	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	-	4	30
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
<b>Faecal-oral</b>																				
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cryptosporidiosis*	-	-	-	-	-	-	-	-	2	1	2	-	-	-	1	1	-	-	7	77
Giardiasis*	2	5	5	5	1	1	4	1	14	7	2	2	3	-	2	-	-	-	54	609
Food borne illness (not otherwise specified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93
Gastroenteritis (in an institution)	-	-	-	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71	163
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Hepatitis A*	3	3	1	1	1	-	1	-	1	1	-	1	-	4	-	-	-	-	17	127
Hepatitis E*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Listeriosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Salmonellosis (not otherwise specified)*	6	8	1	2	2	1	4	2	2	7	4	1	-	3	-	5	2	-	50	866
Typhoid and paratyphoid*	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	21
Verotoxin producing Ecoli*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	--

CSA = Central Sydney Area  
NSA = Northern Sydney Area  
WSA = Western Sydney Area

WEN = Wentworth Area  
SWS = South Western Sydney Area  
CCA = Central Coast Area

HUN = Hunter Area  
ILL = Illawarra Area  
SES = South Eastern Sydney Area

NRA = Northern Rivers Area  
MNC = North Coast Area  
NEA = New England Area

MAC = Macquarie Area  
MWA = Mid Western Area  
FWA = Far West Area

GMA = Greater Murray Area  
SA = Southern Area  
CHS = Corrections Health Service