INFECTIOUS DISEASES – OCTOBER 1997

TRENDS

In August, reports of **pertussis** continued at twice the expected number (see the *NSW Public Health Bulletin*, September-October 1997) and reports of **meningococcal disease** also remained relatively high for this time of year (Figure 4).

MENINGOCOCCAL DISEASE

Three related cases of serogroup C meningococcal disease (SCMD) among students at the Kensington Colleges at the University of NSW were reported in August 1997. In early October, two SCMD cases were reported among students who attended the Intervarsity Rowing Games at Penrith. One of these students also attended the Kensington Colleges, and the other the University of Western Australia. Meanwhile, an unrelated cluster of three SCMD cases was reported at Chevalier College in Bowral in early October. As a precaution, vaccination was offered to students at the Kensington Colleges and Chevalier College.

DNA fingerprinting studies indicated that the strain of bacteria that caused SCMD in the rowers who attended the games was slightly different from that which caused the earlier Kensington Colleges cases.

Meningococcal disease is caused by a bacterial infection. Symptoms include the sudden onset of fever, headache, stiff neck, nausea, weakness, drowsiness and a rash. The disease is spread directly from person to person by droplets or discharges from the nose or throat of a person carrying the bacteria. The bacteria can be carried by some people in their throat without causing illness. The incubation period (time between infection and illness) is usually 3-4 days, but is sometimes up to 10 days. The illness is effectively treated with intravenous antibiotics in hospital.

All cases of meningococcal disease are reportable in NSW. Public Health Units routinely identify those at risk of infection and provide antibiotics and information to close contacts to prevent the further spread of the disease. While the disease is uncommon, early treatment is important, so people are encouraged to watch for the symptoms, and to see a doctor if they occur. Doctors should treat suspected cases with intravenous antibiotics urgently.

Vaccination against meningococcal disease is recommended only in special circumstances – for example, travellers to countries where the disease is common, and for patients with uncommon medical conditions, such as absence of a functional spleen. It provides short-term (about three years) protection against disease caused by serogroups A, C, W135 and Y. The vaccine is not effective against one type of meningococcal bacterium (serogroup B), which accounts for about half of all the NSW cases. It is not very effective in children under two years of age (who have the highest risk of disease).

Enhanced media interest has led to publicity about several additional unrelated cases of meningococcal disease. These included infants from Wagga Wagga and Gosford. In late winter and early spring, between 5 and 10 cases of this disease would be expected to be reported each week in NSW. There were 165 cases of meningococcal disease reported in NSW in 1996. To the end of October 1997, 167 cases had been reported.

MEASLES: ON THE BRINK?

On October 1, 1997 the New England PHU reported that two 10-year-old children had been clinically diagnosed with measles. Both experienced the onset of their illness about September 25; however, they attended different schools. Both had been on the same school excursion to Canberra in the week September 14-19. One of the cases (while infectious) then attended a pony camp in Wee Waa with 120 other children during the school holidays. On October 2, Western Sector PHU reported an 11-year-old girl with the onset of clinically diagnosed measles on September 24 (rash onset September 27) who went on a school camp to Canberra from September 15-17.

Central Queensland PHU reported on October 3 that a student from there had visited Canberra from September 13-19 while infectious with measles. Central Queensland has had an outbreak of measles involving more than 60 children in recent weeks.

Measles is caused by a virus. Symptoms include a cough, runny nose and sore eyes, followed by a generalised rash. It is not a harmless childhood disease; it can sometimes have serious complications including ear infections, pneumonia and brain damage, and can cause death. Measles is highly infectious. Those who contract the disease will require time off school or work while they are sick. A large epidemic of more than 1,000 measles cases has occurred in New Zealand in 1997.

Measles-mumps-rubella (MMR) vaccine will protect children against measles, as well as mumps and rubella. There is no harm in children receiving more than one dose of this vaccine. In addition to routine immunisation at 12 months of age, since 1994 it has been recommended that all children have a booster MMR vaccination between 10 and 16 years of age. People with measles should stay at home until fully recovered, and for at least four days after onset of the rash. Suspect cases should call the doctor before visiting the surgery, so the doctor can make special arrangements to ensure other people in the waiting room are not infected.

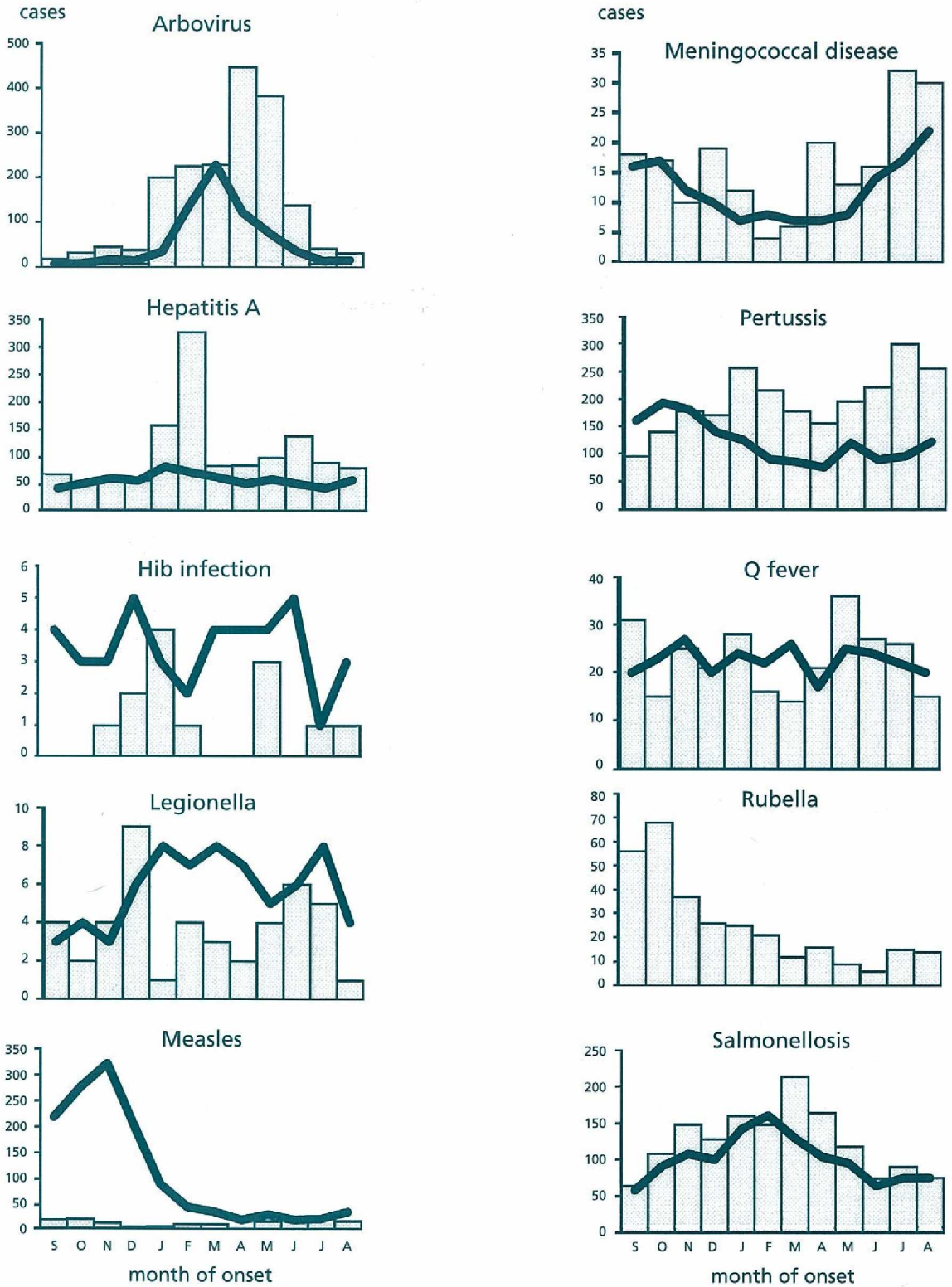
On October 3, New England PHU held immunisation clinics for children who had attended the pony camp at Wee Waa and later for other school students. The PHU also sent information to parents about measles and its prevention, encouraging two doses of vaccine.

The NSW Health Department issued a press release alerting the public that a measles epidemic may be beginning and urging all parents to ensure their children were fully immunised, with at least one dose of MMR vaccine by the age of 12 months, and two doses by the age of 12 years.

The alert was aimed at children who had visited Canberra in the week of September 13-19, and encouraged those who might have measles to stay at home until at least four days after the rash appeared. It also warned parents of others to ensure their children were fully vaccinated.

FIGURE 4

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



Because of data collation problems, historical rubella figures are unavailable.

Sep 96 - Aug 97 / Mean Sep 93 - Aug 96

TABLE 1

INFECTIOUS DISEASE NOTIFICATIONS FOR NSW RECEIVED IN SEPTEMBER 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 Sep**	Total to date**
Blood-borne and sexually transmitted																			
AIDS	–	2	–	–	–	–	–	1	2	–	–	–	–	–	–	–	–	5	178
HIV infection*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	211
Hepatitis B – acute viral*	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–	2	43
Hepatitis B – other*	39	21	–	–	–	1	3	6	34	1	1	6	–	5	–	–	–	117	2,671
Hepatitis C – acute viral*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9
Hepatitis C – other*	45	35	1	–	–	13	37	19	64	28	11	12	4	16	1	9	10	305	5,930
Hepatitis D – unspecified*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6
Hepatitis E	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1	7
Hepatitis, acute viral (NOS)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
Gonorrhoea*	3	2	–	–	–	–	2	–	27	–	1	2	–	–	–	1	–	38	469
Syphilis	3	2	–	–	–	–	–	–	2	–	–	–	–	–	3	–	–	10	401
Vector-borne																			
Arboviral infection*	–	3	–	2	–	–	3	2	2	3	4	1	–	–	–	6	1	27	1,751
Malaria*	1	5	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	7	127
Zoonoses																			
Brucellosis*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
Leptospirosis*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	22
Q fever*	1	–	–	–	–	–	–	–	–	–	1	3	1	–	1	2	–	9	203
Respiratory/other																			
Legionnaires' disease	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	34
Meningococcal (invasive) infection	3	1	5	1	–	1	2	2	1	–	1	2	–	–	1	–	–	20	151
Leprosy	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Mycobacterial tuberculosis	–	3	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	5	258
Mycobacteria other than TB	15	2	–	–	–	–	1	–	3	–	–	1	–	–	–	–	–	22	265
Vaccine-preventable																			
Adverse event after immunisation	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	34
H.influenzae B (invasive) infection	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	12
Measles	–	1	1	1	–	–	2	1	–	–	–	–	–	–	–	–	–	6	142
Mumps*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	22
Pertussis	20	17	18	8	2	–	33	13	19	6	2	1	2	6	–	4	15	166	1,983
Rubella*	–	–	2	2	–	–	–	–	1	–	–	–	–	–	–	–	–	5	128
Tetanus	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
Faecal-oral																			
Cholera*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
Foodborne illness (NOS)	–	–	1	–	–	–	–	–	–	3	–	–	–	–	3	–	–	7	76
Gastroenteritis (instit)	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	1	601
Hepatitis A	8	6	1	–	1	1	6	–	3	7	1	3	2	2	–	–	–	41	1,131
Listeriosis*	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	2	17
Salmonellosis (NOS)*	9	6	4	2	–	–	6	4	12	9	2	1	2	1	1	–	2	61	1,156
Typhoid and paratyphoid*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	18

* 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.

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.