

MURRAY VALLEY ENCEPHALITIS (AUSTRALIAN ENCEPHALITIS)

WHAT IS MURRAY VALLEY ENCEPHALITIS ?

- Murray Valley encephalitis (MVE) is a potentially fatal mosquito-borne disease caused by the Murray Valley encephalitis virus.
- It is also known as Australian encephalitis.

WHERE DOES THE DISEASE OCCUR?

- MVE usually occurs in remote north western Australia. It rarely occurs in eastern Australia.
- To date (May 2001), there have been no human cases in south eastern Australia—including NSW and Victoria—reported since 1974.
- In previous outbreaks, the virus affected people living in western NSW.

HOW IS THE DISEASE SPREAD?

- MVE virus is spread by the bite of a mosquito that is infected with the virus.
- Not all mosquitoes carry the virus.
- The most common species to carry the virus is *Culex annulirostris*. Only one person in about one thousand will acquire the disease after being infected through a mosquito bite.
- The virus is carried by water birds. Mosquitoes become infected by biting birds or other animals that carry the virus. Spread to south eastern Australia is thought to occur with waterbird migration that follows unusually wet conditions in inland Australia.

WHO IS MOST AT RISK?

- The disease is fatal in about 20 per cent of those who become sick, and a further 25 per cent can develop major intellectual and/or neurological complications. About 40 per cent of cases will make a complete recovery.

WHAT ARE THE SYMPTOMS?

- The disease takes about of 5–15 days to develop following the bite of an infected mosquito.
- The great majority of people infected with MVE will have no symptoms. Of those who do, symptoms may include:

- severe headache
- neck stiffness
- fever
- tremors
- seizures (particularly in young children)
- confusion
- vomiting
- nausea
- diarrhoea
- dizziness
- lethargy, irritability, drowsiness
- coma (in severe cases).

- People experiencing these symptoms should seek medical attention.

PREVENTION

There is no specific treatment or vaccine available for MVE. The **only** protection is to **avoid being bitten by mosquitoes**. This is particularly important to travellers and visitors to areas where MVE might be active.

PROTECT YOURSELF FROM MOSQUITOES

Mosquito protection during periods of MVE activity is absolutely essential:

- Avoid being outside when mosquitoes are most active, particularly early in the morning and from just before sunset to mid-evening.
- Wear loose fitting light coloured clothing with long sleeves, long trousers and socks. Mosquitoes can bite through tight fitting clothes.
- Use insect repellent when outdoors and reapply when appropriate. Lotions and gels are more effective and longer lasting than sprays.
- Make sure flyscreens and doors are in good order, if camping out sleep under a mosquito net or in a mosquito-proof tent.
- Use a 'knock down' insect spray before going to bed to kill any mosquitoes that are indoors.

For further information contact your doctor, community health care centre or your nearest Public Health Unit.

April 2001. 

COMMUNICABLE DISEASES, NSW: APRIL 2001

TRENDS

Highlights of communicable diseases notifications in NSW through to February 2001 include continuing

declines in pertussis, measles and rubella, and continuation of the seasonal rise in arboviral infections, due to Ross River and Barmah Forest viruses (Figure 8, Table 14).

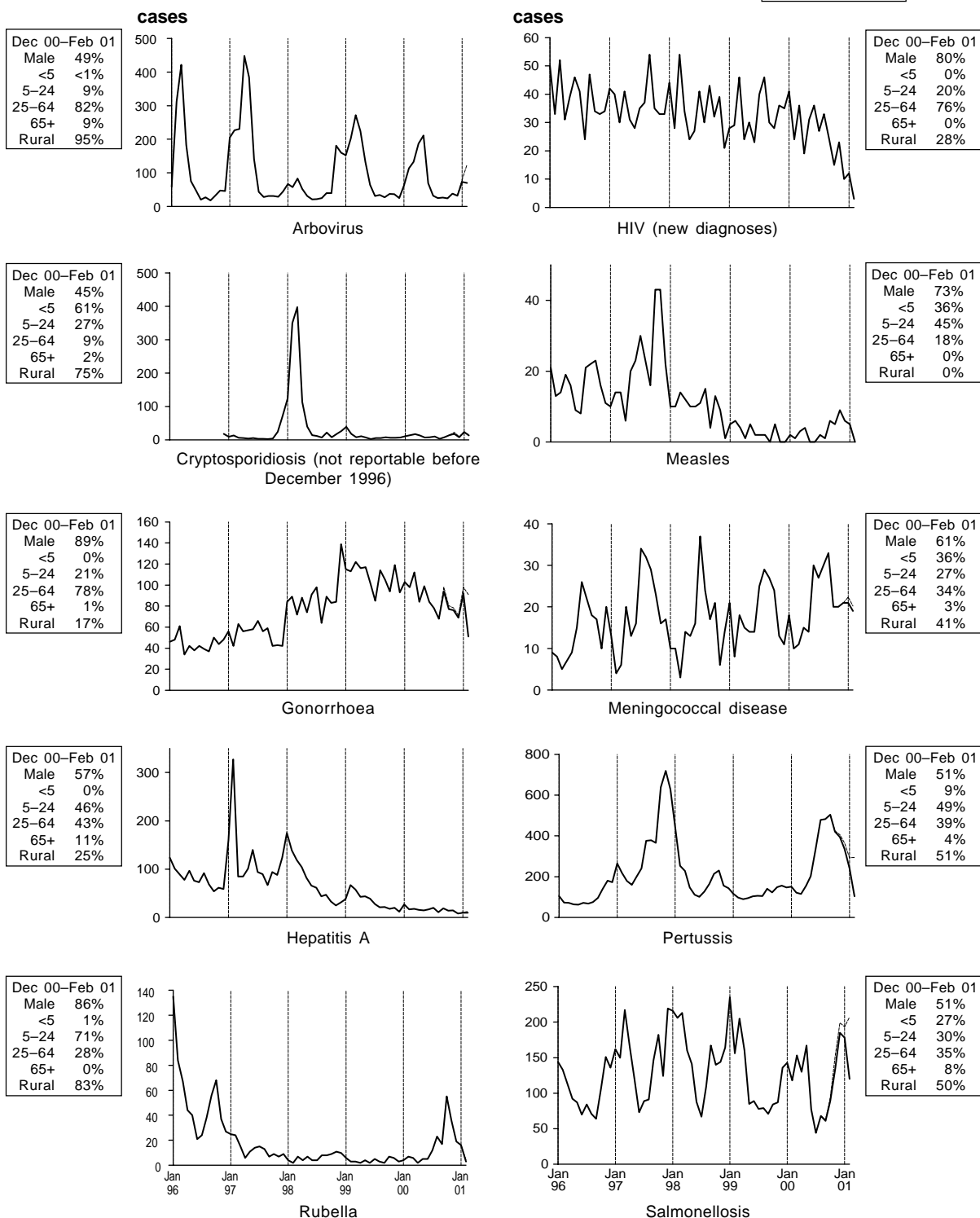
FIGURE 8

REPORTS OF SELECTED COMMUNICABLE DISEASES, NSW, JANUARY 1996 TO FEBRUARY 2001, BY MONTH OF ONSET

These are preliminary data: case counts for 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	7%
5–24	28%
25–64	52%
65+	13%
Rural*	42%



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

TABLE 14 **REPORTS OF NOTIFIABLE CONDITIONS RECEIVED IN FEBRUARY 2001 BY AREA HEALTH SERVICES**

Condition	Area Health Service (2001)																		Total	
	CSA	NSA	WSA	WEN	SWS	CCA	HUN	ILL	SES	NRA	MNC	NEA	MAC	MWA	FWA	GMA	SA	CHS	for Feb†	To date†
Blood-borne and sexually transmitted																				
AIDS	2	-	1	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-	7	33
HIV infection*	1	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	3	15
Hepatitis B - acute viral*	-	-	-	-	1	-	-	1	2	2	-	-	6	-	-	-	1	-	13	19
Hepatitis B - other*	-	23	25	1	63	2	6	7	39	5	5	3	1	-	3	4	4	6	198	554
Hepatitis C - acute viral*	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1	3	15
Hepatitis C - other*	-	39	45	17	61	17	38	25	66	41	31	17	5	11	1	15	16	70	518	1,304
Hepatitis D - unspecified*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hepatitis, acute viral (not otherwise specified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chancroid*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlamydia (genital)*	-	23	14	5	20	5	20	11	86	17	15	7	6	3	9	5	11	3	264	557
Gonorrhoea*	-	5	3	3	4	2	1	1	34	3	2	1	1	2	1	-	3	2	72	177
Syphilis	1	-	4	1	3	-	-	-	17	4	-	1	2	-	-	-	-	2	36	95
Vector-borne																				
Arboviral infection (BFV)*	-	-	-	-	-	-	1	1	-	6	6	-	-	-	2	1	2	-	19	35
Arboviral infection (RRV)*	-	1	1	-	1	-	4	2	-	11	6	15	9	2	1	25	-	-	78	116
Arboviral infection (Other)*	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Malaria*	-	4	-	1	2	-	-	1	2	1	-	-	-	-	-	-	1	-	13	27
Zoonoses																				
Anthrax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis*	-	-	-	-	-	-	3	-	-	1	1	4	-	-	-	-	-	-	9	16
Lyssavirus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psittacosis	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	5
Q fever*	-	-	-	-	-	-	1	1	-	1	4	1	1	3	-	-	-	-	12	29
Respiratory and other																				
Blood lead level*	-	-	-	-	1	-	3	5	1	-	-	-	-	-	13	1	-	-	24	48
Influenza	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	2
Invasive Pneumococcal Infection	-	1	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	4	9
Legionnaires' Longbeachae*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	2
Legionnaires' Pneumophila*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Legionnaires' (Other)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Meningococcal infection (invasive)	1	7	3	-	3	-	-	2	-	-	1	-	-	-	-	1	-	-	19	42
Mycobacterial tuberculosis	3	4	8	-	3	1	-	-	3	1	-	-	-	-	-	-	-	-	24	60
Mycobacteria other than TB	1	-	-	-	-	-	-	-	1	1	-	-	-	-	-	2	-	-	5	18
Vaccine-preventable																				
Adverse event after immunisation	1	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	3	5
H.influenzae b infection (invasive)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Measles	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6
Mumps*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Pertussis	9	16	26	9	20	8	43	22	30	11	16	19	14	7	-	14	4	-	268	583
Rubella*	-	-	-	-	1	-	4	1	1	-	-	-	-	-	-	1	-	-	8	27
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Faecal-oral																				
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cryptosporidiosis*	-	-	1	1	1	-	-	-	5	3	1	4	-	-	-	1	-	-	17	39
Giardiasis*	-	3	7	1	4	2	6	6	12	9	1	1	2	2	-	1	1	-	58	128
Food borne illness (not otherwise specified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gastroenteritis (in an institution)	-	11	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	76	174
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Hepatitis A*	3	1	2	-	-	-	-	-	2	-	1	-	-	-	-	-	-	-	9	20
Hepatitis E*	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3
Listeriosis*	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	-	-	3	5
Salmonellosis (not otherwise specified)*	1	21	12	9	15	5	14	1	14	30	18	9	3	2	2	4	1	-	161	356
Shigellosis	-	-	1	-	-	1	-	-	5	1	-	-	-	-	-	-	-	-	8	10
Typhoid and paratyphoid*	2	-	3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	7	9
Verotoxin producing Ecoli*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* lab-confirmed cases only

† includes cases with unknown postcode

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