

Additional Reports

Sentinel Chicken Surveillance Programme

Sentinel chicken flocks are used to monitor flavivirus activity in Australia. The main viruses of concern are Murray Valley encephalitis (MVE) and Kunjin which cause the potentially fatal disease Australian encephalitis in humans. Currently 27 flocks are maintained in the north of Western Australia, seven in the Northern Territory, nine in New South Wales and ten in Victoria. The flocks in Western Australia and the Northern Territory are tested year round but those in New South Wales and Victoria are tested only from November to March, during the main risk season.

Results are coordinated by the Arbovirus Laboratory in Perth and reported bimonthly. For more information see CDI 2000;24:8-9.

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January/February 2000

Sentinel chicken serology was carried out for 25 of the 27 flocks in Western Australia in January and February 2000. The first MVE virus activity of the wet season

was detected in both the Kimberley and Pilbara regions in January 2000. Seroconversions to MVE virus occurred in the Wyndham and Fitzroy Crossing flocks in the Kimberley region and at Paraburdoo in the Pilbara. There have been further seroconversions in February at Wyndham, Kununurra, Fitzroy Crossing and Broome in the Kimberley and Karratha, Harding Dam, Tom Price, Paraburdoo, Ophthalmia Dam and Newman in the Pilbara. The number of chickens positive for flavivirus antibodies by ELISA at each site and the identity of the infecting virus(es) are shown in Table 4. A number of the later seroconversions have not yet been confirmed. Media warnings have been issued by the Health Department of Western Australia to warn residents in the Kimberley and Pilbara regions of the increased risk of disease. Additional warnings were also sent out by the Regional Public Health Units to Aboriginal communities in the region.

It should be noted that there are now only 27 flocks in Western Australia as the flock at Pardoo in the Pilbara is no longer part of the program.

Serum samples from all 7 of the 7 Northern Territory sentinel chicken flocks were tested in the laboratory in January 2000 and from 5 flocks in February 2000. There were 4 seroconversions to flaviviruses (3 to MVE and 1 to flavivirus only) in the Beatrice Hill Farm flock (east of Darwin) in February 2000.

There have been no seroconversions to flaviviruses in the New South Wales and Victorian sentinel chicken flocks over this period.

Details of the locations of all chicken flocks are given in CDI 2000;24:8-9.

Table 4. Flavivirus seroconversions in Western Australian sentinel chicken flocks in January and February 2000

Location	January 2000			February 2000		
	MVE	MVE/KUN	KUN	MVE	MVE/KUN	KUN
Kimberley						
Wyndham	1					1#
Kununurra				2	1	1
Fitzroy Crossing	4			1		
Broome*				3#		
Pilbara						
Karratha				3#	1#	
Harding Dam*				1		
Tom Price				4		
Paraburdoo	4			1#	1#	
Ophthalmia Dam				2	1	
Newman				3		

* 2 flocks of 12 chickens at these sites

result not yet confirmed

MV Antibodies to Murray Valley encephalitis virus detected by ELISA

KUN Antibodies to Kunjin virus detected by ELISA