

**QUARTERLY HIGHLIGHTS****Anthrax**

Investigations into the death of nine out of 100 ten-month-old steers on a property at Dubbo area found the cause to be anthrax. The animals were not vaccinated and smears of blood discharges were positive for *Bacillus anthracis* using the Polychrome Methylene Blue stain. The property and those neighbouring it have a prior history of anthrax.

Four other investigations of sudden death during the quarter were smear negative for anthrax. Three of the investigations (two cattle and one sheep) were in the known anthrax belt, the fourth was the death of 2 out of 40 dairy heifers on the coast which died within a week of purchase from a sale.

Foot and Mouth Disease Exclusion

A NSW Agriculture emergency response team attended a saleyard following the detection of lameness and possible vesicular lesion on the snout of one of a group of pigs that originated from a piggery in central NSW. Detailed examination of the animals suggested that Foot and Mouth Disease (FMD) was unlikely. Samples taken for disease exclusion were negative on FMD antigen and antibody ELISA and virus isolation tests.

Hendra virus exclusion

Two north coast horses from the same district were tested negative for Hendra Virus. Both horses presented with sudden onset of abnormal respiratory signs which may have been consistent with Hendra virus infection. *Pasteurella caballi* and *Peptostreptococcus* sp were isolated from lung abscesses in the first horse. Snake bite was suspected in the second.

Australian Bat Lyssavirus

Four positive diagnoses of Australian Bat Lyssavirus were made in bats during the last quarter, two cases from the Sydney area and two from the North Coast. Neurological clinical signs were observed in all cases and diagnosis was confirmed by lyssavirus antigen detection and virus isolation from brain material. Meningoencephalitis was the histological diagnosis reported in three of the four cases, the samples were unsuitable for histology in the other.

Contact: Barbara Moloney, Orange on (02) 6391 3687

Equine herpes virus (EHV-1)

The first case of equine herpes viral abortion this season has been reported in a stud near Tamworth in May. There was only one other mare on the property at the time of detection and both animals have been isolated. Vaccination against EHV is practised on the property. The Code of Practice developed by the AEVA has been implemented.

Contact: Rod Hoare, EMAI on (02) 4640 6308

Chlamydiosis

Fifty human admissions for psittacosis were recorded in the Blue Mountains area by the Wentworth Area Health (human) Service (WAHS) between March and June 2002. WAHS has commenced a study of cases treated by general practitioners over the same period.

As part of a collaborative investigation with WAHS, NSW Agriculture examined four bird submissions from the Blue Mountains. One submission, submitted by WIRES, tested positive to Chlamydia. An association has not been made between the human case and the single positive avian diagnosis. The joint investigation and epidemiological assessment is continuing.

Chlamydiosis was diagnosed in a wild pigeon found in poor condition on the outskirts of Sydney. Reports of other avian deaths in this area have been noted, however the cause was not determined. A private practitioner diagnosed Chlamydia in a bird that died soon after purchase from a Sydney pet shop in June.

Investigations are continuing into two human cases (children) in the north coast area believed to be associated with the purchase of the newly acquired canary.

Contact: George Arzey, EMAI on 02 4640 6402

Australian Wildlife Health Network

NSW Agriculture and Taronga Park Zoo have won the bid to host the Australian Wildlife Health Network. The network is currently considering wildlife disease surveillance requirements against which future surveillance programs may be tailored.

Contact: Barbara Moloney, Orange on (02) 6391 3687

PMWS Survey

NSW Agriculture staff have initiated a surveillance program for Post-weaning Multi-systemic Wasting Syndrome (PMWS) in pigs. This disease complex has been associated with serious production losses in Europe. Although (Porcine Coronavirus 2) PCV2 virus is present in Australia, the disease syndrome itself has not been reported. This survey will attempt to determine whether not it is present.

Contact: Greg Curran, Broken Hill on (08) 8087 1222

Research Project- Giardia & Cryptosporidium

A research project is commencing into the public health significance of animal strains of Giardia and Cryptosporidium sp. Could anyone with isolates or positive cases please contact Dr Paul Morris, SA Water on (08) 8259 0312.

Further information available from Lee Cook on (02) 6391 3722

DISEASE MONITORING

National Arbovirus Monitoring (NAMP)

Akabane

Akabane transmission was less extensive and slower than usual. This is expected due to the unfavourable seasonal conditions. The extremely cold winter may have an influence on the development of vector populations and virus transmission next season. No disease due to *Akabane* virus has been observed in the State

Bluetongue

The seroconversions on the far North Coast followed relatively normal patterns for a season with suppressed arbovirus activity. The lack of transmission in the Hunter Valley for 2 successive years has implications for the definition of bluetongue zones in NSW. No isolates of bluetongue viruses have been made to date.

Bovine Ephemeral Fever (BEF)

The limited spread of BEF this year is probably the result of a combination of poor seasonal conditions and a high level of population immunity following widespread transmission last season.

Entomology report

40 light traps were placed around NSW to determine the movement of *Culicoides brevitarsis* in the state. Only 8.3% of possible samples were missed and this is mainly because of destocking due to the severe drought. *C. brevitarsis* reached as far south as Nowra in February but was not recorded west of the Great Dividing Range. Activity was terminated in late May at the onset of what has been a cold winter.

Contact: Dr Peter Kirkland, EMAI on (02) 4640 6331

Enzootic Bovine Leucosis (EBL)

In June 2002 the only remaining EBL Infected dairy herd in the State was whole herd tested with clear negative result and was progressed to Provisionally Clear status. For the first time, since the beginning of the NSW EBL Eradication Program in 1992 there are no EBL Infected dairy herds on record. The remaining seven (7) Provisionally Clear herds remain quarantined. The herds are expected to complete required testing by the end of 2002.

Contact: Richard Zelski, Tocal on (02) 4939 8959

Bovine Johne's Disease Market Assurance Program (Cattle MAP)

At the end of the June quarter there were 1440 herds tested under the CattleMAP in NSW consisting of 162,284 head of cattle. Of these, 795 herds (72,092 cattle) have had 2 screening tests, 299 herds (12,485 cattle) have had 3 screening tests and 6 herds (129 cattle) have undergone 4 tests.

There have been 342 reactors from 203 herds during round 1 testing, 89 reactors from 52 herds during round 2 testing and 21 reactors from 10 herds during round 3 testing. This reactor rate remains steady at 0.20% of animals tested. Of the 203 round 1 reactor herds, 27 (1.9%) have been detected as infected, 7 herds (0.8%) have been detected as infected at or prior to round 2 testing and 2 (1.3%) have been infected at or prior to their 3rd test.

The current number of herds with a status under the Cattle MAP is outlined below in Table 1.

Table 1: Status of CattleMAP herds in NSW

NSW CattleMAP Status	June 2002	December 2001	December 2000
MN1	282	338	356
MN2	348	326	313
MN3	308	299	248
Total MN1 – MN3	938	963	917
NA (dropped out)	379	305	194
IN (detected by testing in MAP)	36	36	29

Contact: Tim Jessep, Goulburn on (02) 4823 0744

Ovine Johne's disease (OJD)

At the end of June there were a total of 367 market assured flocks in NSW, representing about 1% of the State's sheep flocks. One hundred and forty of these flocks have successfully progressed to Monitored Negative 2 (MN2) status, and fifteen have progressed to MN3 status.

There have been 1,018 infected (IN) flocks identified in NSW since 1980, with 840 (2.6% of the State's flocks) still having an IN status. Of the 840 current known infected flocks, 460 (54.8%) are in the Residual Zone. About 13.6% (460/3388) of flocks in the Residual Zone are known to be infected, compared to 1.1% (296/27133) in the Control Zone, and 7.0% (84/1200) in the Residual/Control Zone. There were 79 new Infected flocks reported during the April to June quarter, with 26 of these in the Yass RLPB district, 15 in the Goulburn RLPB district and 14 in the Central Tablelands RLPB district. Table 2 summarises the current status situation in NSW.

Table 2: Summary of current status by zone.

Current Status									
ZONE	Flocks *	IN	SU	US	NA	MN 1	MN 2	MN 3	Total
Control	27,133	296	391	1,111	1,333	190	123	12	3,456
Residual	3,388	460	359	1,498	239	17	16	1	2,590
R/C	1,200	84	82	282	125	5	1	2	581
Total	31,721	840	832	2,882	1,697	212	140	15	6,627

* Total flock numbers in Control, Residual and Residual/Control zones are approximate only. Currently Yass is the only RLPB which is zoned part Residual and part Control.

MAP figures are as per the NSW SheepMAP Central Database

IN: Infected; SU: Suspect; US Under Surveillance; NA: Nil Assurance; MN: Monitored Negative;

National Veterinary Committee has endorsed the implementation of Protected Zones and revised Residual/Control Zone boundaries in the Eastern States scheduled for 1st October 2002.

Contact: Ian Links, Wagga Wagga on (02) 6938 1992

National TSE Surveillance Program

Submissions in the first half of the year are well below average. Possibly owners are less likely to call a vet during the current severe drought. There may be several reasons for this, they may feel that they can no longer afford a vet, they are simply culling or destroying stock whose health is suspect, or they are busy feeding.

Table 3: TSE submissions by Rural Lands Protection Board 1/01/2002 to 30/06/2002

RLPB	District Vet		Abattoir Vet		Private Vet		Total	
	Sheep	Cattle	Sheep	Cattle	Sheep	Cattle	Sheep	Cattle
SFVO DUBBO REGION								
BROKEN HILL	1						1	
DUBBO			4				4	
WILCANNIA	2						2	
Region Total	3	0	4	0	0	0	7	0
SFVO GOULBURN REGION								
BOMBALA	1						1	
COOMA					1		1	
Region Total	1	0	0	0	1	0	2	0
SFVO GRAFTON REGION								
ARMIDALE	7				3		10	
CASINO		3						3
NORTHERN NEW ENGLAND	2	3					2	3
TWEED-LISMORE		1						1
Region Total	9	7	0	0	3	0	12	7
SFVO GUNNEDAH REGION								
COONAMBLE			1				1	
NARRABRI	4	1					4	1
TAMWORTH	2					1	2	1
WALGETT			2				2	
Region Total	6	1	3	0	0	1	9	2
SFVO MAITLAND REGION								
MAITLAND		1						1
Region Total	0	1	0	0	0	0	0	1
SFVO ORANGE REGION								
CENTRAL TABLELANDS	2						2	
FORBES	1						1	
MUDGEES-MERRIWA			1				1	
Region Total	3	0	1	0	0	0	4	0
SFVO WAGGA WAGGA REGION								
HUME	2	2			10	13	12	15
MURRAY			3				3	
NARRANDERA		1						1
RIVERINA			3			2	3	2
WAGGA WAGGA				1	1		1	1
Region Total	2	3	6	1	11	15	19	19
GRAND TOTAL	24	12	14	1	15	16	53	29

Contact: Belinda Walker, Gunnedah on (02) 6741 8363

Getting Information on the Occurrence of Animal Diseases

This surveillance report can only convey a very limited amount of information about the occurrence and distribution of livestock diseases in New South Wales. If you would like more specific information about diseases occurring in your part of the State, contact your local Rural Lands Protection Board district veterinarian; Departmental senior field veterinary officer; or Regional Veterinary Laboratory.

For statewide information, contact NSW Agriculture's Quality Assurance Program in Orange on (02) 6391 3237 or fax (02) 6361 9976.

For more information on national disease status check out the National Animal Health Information System (NAHIS)

via the the Internet at:

<http://www.aahc.com.au/nahis/>

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Copies of NSW Animal Health Surveillance reports are available on the Internet at

<http://www.agric.nsw.gov.au/QA/Newsletter>



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