

6. Disease control

A. Enzootic Bovine Leucosis (EBL) control scheme

- 2.5% of herds have a positive EBL Status
- A decline in confirmed positive herds from 674 to 344
- 5596 herds (40%) achieve a “Free” herd status

Enzootic Bovine Leucosis (EBL) is a slow spreading viral disease that affects the immune system of cattle by attacking white blood cells. The virus can be spread by any action that exposes healthy animals to blood or milk from infected animals. A small percentage (5%) of animals affected by the EBL virus will develop a fatal cancer.

The New Zealand Dairy Industry implemented a control scheme in 1997 with the aim of eradicating this disease by 2005. International recognition of New Zealand dairy herds becoming “EBL – Free” is expected to confer long-term marketing advantages for product and animal exports.

At the end of the 1999/2000 season 206 herds (59.9%) had culled the confirmed positive stock and require re-testing in 2000/2001 to determine herd status. Of the herds that still had known positives, 92 herds (26.7%) have less than 6 positive cows. A further 20 herds had from 6 to 10 positive cows (5.8%). Only 26 herds had more than 10 positive cows (7.6%). Table 6.1 provides a summary of progress that has been made since the 1997/98 season.

The virus that causes EBL is not easily spread and the disease can be controlled within herd using well-proven methods. New cases within high incidence rate herds is not uncommon, however with control measures now in place for the fourth season it is expected that fewer new cases will be seen. The EBL control scheme contracts veterinarians to assist herd owners/managers of infected herds, by providing technical advice and implementing management plans.

Table 6.1: Summary of Enzootic Bovine Leucosis (EBL) status for all dairy herds since 1997/98

Status	Herds 97/98	% 97/98	Herds 98/99	% 98/99	Herds 99/00	% 99/00
Blood Positive	891	6.1	674	4.7	344	2.5
Individual Milk Positive	68	0.5	67	0.5	28	0.2
Pool Milk Positive	108	0.7	19	0.1	4	0.0
Monitored Positive (vat test only)	91	0.6	30	0.2	30	0.2
Suspect (purchased from positive herd)	158	1.1	377	2.6	359	2.6
Free	–	–	1,298	9.0	5,596	40.4
Negative Year 2	1,331	9.1	5,221	36.4	4,086	29.5
Negative Year 1	5,718	39.0	5,100	35.5	1,650	11.9
Provisionally Negative	–	–	478	3.3	684	4.9
Monitored Negative (Vat test only)	5,438	37.1	1,033	7.2	497	3.6
Untested	870	5.9	65	0.5	583	4.2
Total	14,673		14,362		13,861	



B. Tuberculosis (TB) control

• Number of infected dairy herds about the same as the previous season

Tuberculosis (Tb) is a chronic infectious disease characterised by the formation of tubercles in the tissues of the body. Various tissues and organs including the lungs, lymphatic system, kidneys, liver, intestines and brain may become infected. The disease is caused by the organism *Mycobacterium* spp. of which there are three strains: *M. bovis* (cattle), *M. tuberculosis* (human) and *M. avian* (bird). Cattle can be susceptible to strains other than *M. bovis* and react to initial testing in the same way but the disease is not as serious with this infection.

Control of Tb (*M. bovis*) over the agricultural industry is managed by the Animal Health Board whose primary objective is to manage Tb to reduce the number of infected herds and to prevent Tb vector free areas becoming vector risk areas. The status of a vector area is determined by the prevalence of wild animals that are considered a source of infection (e.g., possums, ferrets).

In 1999/00 the number of infected dairy herds (131) remains similar to the previous season (135).

Table 6.2: 1999/00 Tuberculosis (Tb) testing and results

Region	Vector status	Number of infected dairy herds June 2000	Number of dairy cattle primary tested	Number of Tuberculous# dairy cattle
Northland	Free	0	110,018	0
Auckland	Free	0	50,748	0
	Risk	0	10,863	0
Waikato	Free	9	1,187,504	96
	Risk	8	154,451	55
Bay of Plenty	Free	1	112,069	5
Gisborne	Free	0	868	0
Hawkes Bay	Free	1	15,911	1
	Risk	0	2,928	0
Taranaki	Free	1	183,157	1
Manawatu / Wanganui	Free	1	112,371	1
	Risk	4	70,040	20
Wellington	Risk	15	110,347	22
Nelson / Marlborough	Free	1	43,548	1
	Risk	2	11,279	2
West Coast	Free	1	2,429	2
	Risk	59	139,148	95
Canterbury	Free	1	118,301	2
	Risk	7	79,701	10
Otago	Free	5	65,056	7
	Risk	12	67,422	31
Southland	Free	3	120,645	21
	Risk	0	20,766	0
North Island	Free	13	1,772,646	104
	Risk	27	348,629	97
North Island	Total	40	2,121,275	201
South Island	Free	12	349,979	33
	Risk	79	318,316	138
South Island	Total	91	668,295	171
New Zealand	Free	25	2,122,625	137
	Risk	106	666,945	235
New Zealand	Total	131	2,789,570	372

Sourced from Animal Health Board – Annual Report for the year ending 30 June 2000
'Tuberculous Animals' include lesioned reactor cattle and lesioned cull cattle

