

Disease detection made easy

Producers take advantage of NML's one-stop disease testing

Herd health planning is a much-publicised formal title for what many producers, with their vets, are already doing. But there is pressure to make this planning more proactive. This relies on routine disease testing and a hassle-free route is through NML disease testing services.

National Milk Laboratories (NML) is a sister company of NMR. Two sites, at Wolverhampton and Hillington near Glasgow, cover Britain and are contracted to carry out milk tests for payment purposes for 95% of dairy herds. "NML has also developed separate laboratories, but under the same roof, that can carry out disease tests as well as microbiology," says NML director Ben Bartlett. "We've invested heavily in facilities and staff – and we are confident that we offer a range of disease tests on milk samples to support effective herd health management."

Hassle-free and speed

But what makes the services really attractive to producers and their vets – 80% of NML's disease testing business

Vet support for cost-effective health checks

Somerset based dairy vet Peter Edmondson is a firm advocate of regular disease testing. "There are cases where the herd might be vaccinated for BVD and Lepto and control measures are in place – in which case it is often not necessary to carry out routine tests. "But for many herds, checking for diseases such as IBR, BVD, Lepto and Johne's is good practice. We encourage producers to establish the health status of their herd and carry out cost-effective control measures." While many producers are very anxious to vaccinate their herds for Bluetongue, Mr Edmondson suggests

comes via the vet – is the hassle-free system and speed with which the tests can be undertaken through NML. "We have a rolling store of fresh milk samples for most herds in the payment testing lab," adds Mr Bartlett. "We can use one or more of these 'spares' for additional testing such as microbiology or disease tests. Or, if individual cow tests are requested, we can draw from samples collected during the routine NMR recording. So there's no extra sampling for the producer or vet and no time lag while the samples find their way to us by post."

Simplicity breeds success

This simplicity is what NML attributes to the success of the service. "That and the structure of the service. We offer a routine Healthcheck service, which

they may be ignoring other diseases already in the herd. "This is a classic case of producers reacting to a new disease, which may or may not occur on their farm. However, there may be problems under their noses that warrant just as much attention. "Our aim is to control diseases which are already present on the farm, and to prevent new ones occurring. In order to establish what is or is not present, herd screening for these diseases is essential. This is a cost-effective route to establishing and maintaining a healthy herd."

includes a bulk test for IBR, BVD, Lepto and Johne's, every three months and this costs £19 a quarter – or £76 in total for a year. For an average 200-cow herd that's just 36p a cow. If you consider the cost of a possible disease outbreak it pays for itself, hands down." NML offers a range of options. Although



Orange boxes from NMR (above) and bulk milk samples from NML (below): Samples from both sources can be used for disease testing



Tecan robot to plate out milk samples for disease testing by ELISA

Figure 1: NML Testing Services: a guide (for more information on the services mentioned in the table contact NML Customer Services on 08701 622547)

service	test	description	price
Milkcheck	Milk quality	Continuous bulk milk testing for milk quality and constituent parameters. Allows daily milk quality monitoring and can assist in the management of bactoscans and SCCs	price available from milk purchaser
Microcheck	Bacto breakdown	Routine or ad-hoc test on bulk samples to identify bacteria present in milk sample	£37.50 per sample
		Can be used following high Bactoscan result. Results determine which area of cow or plant hygiene requires particular attention.	
	Mastitis ID	Uses individual cow milk samples to identify mastitis causing pathogens in cows with high SCCs or mastitis. Results assist in determining specific treatment	£40 for a kit to test five samples
Healthcheck		Range of disease tests carried out, on bulk or individual cow milk samples, to establish the disease status of the herd and, with the vet, prescribe the most appropriate course of action	£76 per annum for all four diseases on a quarterly basis
		Tests include:	
	BVD	Bovine Viral Diarrhoea, virus that affects the immune system. Infection is widespread in the national herd with evidence of infection in up to 95% of herds	individual cow testing from £2.00 per disease
		Animals infected with BVD virus have increased susceptibility to other diseases. High on-farm losses are associated with BVD-infected herds in terms of reduced fertility and loss of production	
	Lepto	Leptospirosis in cattle is caused by two species of Leptospira. It is characterised by milk drop, infertility and abortion. After infection, bacteria localise in the reproductive tract and kidneys	
		Effective control in an infected herd may be achieved through a vaccination programme	
	IBR	Infectious Bovine Rhinotracheitis is an acute viral disease. It infects the upper respiratory tract and causes lung infections (fatal pneumonia) and reproductive tract infections leading to abortion and reduced fertility	
	Johne's Disease	Johne's disease is described as chronic enteritis of ruminants. The main clinical signs are abundant diarrhoea and weight loss	
		At NML testing for these diseases involves using an ELISA to identify antibodies against the disease	



Ben Bartlett: "No extra milk sampling required"

many opt for the full Healthcheck testing for four diseases – with more to be added later in the year – it is possible to pick and mix disease tests to suit the herd." The test cost versus the cost and implications of disease outbreaks is why NML believes demand for its services has increased rapidly in the past few years. And NML does its utmost to provide a fast and efficient service, sending results back to producers and their vets, by agreement, via the NMR Herd Companion website www.nmr.co.uk or by post."

Karen Wright