Welcome to volume 2, issue 3 of *Paws Claws and Udder Things*. New test development is a constant focus for Gribbles Veterinary, although identifying tests that meet veterinarians’ requirements and which are commercially viable is a difficult proposition. For every test that makes it to the validation stage (for example free T4 by equilibrium dialysis and the bovine herpesvirus-1 PCR assay), several others will have been assessed but not subsequently launched. This is why I am so delighted with the response to Gribbles Veterinary’s hygiene monitoring programme - clearly in this case we have identified a service that adds value to the profession at a cost that is not seen as prohibitive.

Kevin Darling  
General Manager  
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Selenium toxicity in lambs

Selenium is an essential trace element required for optimal animal health; however, large parts of New Zealand’s farming country are marginally to markedly deficient in this element. In higher dosages selenium is highly toxic to stock and the margin of safety between health and poisoning is very small.

There are currently over twenty products containing selenium as sodium selenate licensed for use in livestock. These can be administered as a 'pour-on', injected, orally drenched or toppedressed on pasture. Many of the injectable products available for sheep contain vaccines or vitamins as well as sodium selenate. This makes them especially attractive to farmers who may not realise that the selenium in them has the potential to be four times more toxic than the same concentration of selenium administered orally.

Three to four week old lambs are by far the most commonly affected age group for selenium toxicity. These lambs are usually given selenium at tailing but, at this age, should not be given any more than 1-2mg of sodium selenate at any one time.

Lambs poisoned by selenium will typically die within the first 24-48 hours after dosing and are usually either discovered dead or frothing at the mouth with breathing difficulties. A post mortem will reveal marked lung oedema with fluid in the airways. A diagnosis of selenium poisoning is confirmed by measuring the concentration of selenium in the liver. Toxic concentrations are usually taken as >30,000nmol/Kg.

Below are three typical cases of ovine selenium poisoning:

**Case 1**
Seventeen, one-month-old lambs were found dead shortly after tailing. At tailing they had been given Vitamin B12 and selenium by injection, as well as a mineralised worm drench containing selenium. Selenium poisoning was confirmed by very high concentrations in the livers of two of the dead lambs.

**Case 2**
Nineteen of a mob of eighty three-week-old lambs were found dead 24 hours after tailing where they had been given 1.5ml of a clostridial vaccine containing 5mg/ml of sodium selenate. This vaccine is designed for adult ewes only and the product labelling clearly stated this. Selenium toxicity was confirmed by finding high concentrations in the liver of a dead lamb.

**Case 3**
Twelve of a mob of two hundred lambs were found dead 24 hours after tailing where they had been injected with 1ml of the same selenium containing vaccine as in Case 2.

A modified version of this article, including advice for farmers, is available for inclusion in practice newsletters. Please contact your business development manager or local laboratory to request a copy.

John Gill
Swabs for bacterial culture

Please remember to submit all swabs for bacterial culture to the laboratory using swabs in transport media (NOT dry swabs). The transport medium is designed to maintain the viability of organisms during transit to the laboratory.

The survival of bacteria in a transport medium depends on many factors. These include the type of bacteria, duration of transport, storage temperature, concentration of bacteria in the sample, and formulation of the transport medium. By placing swabs in transport media for sending to the laboratory, microorganism viability will be maintained for approximately 24 to 48 hours, which is generally sufficient time for the sample to be received and processed in the laboratory.

Samples submitted on dry swabs are not suitable for culture; however, we can use them to perform a Gram’s stain and they can also be used for a number of PCR assays.

If you require transport media swabs, please contact your local laboratory for details.

Karen Cooper

VetAlert reminder

In direct response to feedback from a number of production animal veterinarians, Gribbles Veterinary is proud to launch its new service, VetAlert. In a New Zealand first, veterinarians can now request notification by text when their urgent laboratory results become available. This service will be particularly useful to large animal vets working in the field with little or no access to fax or e-mail, allowing them to contact the clinic or laboratory to receive their results verbally as soon as they are finalised.

The VetAlert service is provided free of charge and informs the recipient whether results are ‘normal’ or if some or all of the results are outside of the reference interval/s, enabling them to make decisions about urgent cases which may otherwise have had to wait until they returned to the clinic in person.

When submission forms are reprinted later this year, Gribbles Veterinary will add a VetAlert check box; in the meantime however, veterinarians should simply mark their submission forms clearly with the word ‘VetAlert’ and ensure that they include the number of the mobile phone to which they would like the notification text sent.
Companion animal preventative health brochure launched

As part of the re-launch and re-branding of our ever popular Pet Check brochures (overweight, senior and pre-anaesthetic), Gribbles Veterinary has produced a new brochure explaining to pet owners the importance of regular health screening and the benefits of laboratory testing. Written using plain English, the new brochure also answers the question ‘what is pathology?’ and goes on to explain in general terms the range of tests that may be completed at the laboratory. As with all our point of sale material, the new preventative health brochure is available free of charge and we hope that veterinarians will find it a useful tool to have available in the consulting room.

Electronic *Brucella ovis* submission form now available

In an effort to simplify the process of submitting samples for *Brucella ovis* testing, Gribbles Veterinary has produced an electronic *Brucella ovis* submission form which has been designed specifically for veterinarians submitting under the *Brucella ovis* flock accreditation scheme. Produced in collaboration with the *Brucella ovis* Accreditation Committee, the fully editable form is now available on the Gribbles Veterinary website or by contacting your local laboratory.

If you have any questions regarding the *Brucella ovis* flock accreditation scheme, please contact the serology department at Gribbles Veterinary Palmerston North, and Gail Ross and her team will be happy to assist you.

Contact us

Contacting Gribbles Veterinary couldn’t be easier:

auckland.vetlab@gribbles.co.nz
hamilton.vetlab@gribbles.co.nz
palmerston.vetlab@gribbles.co.nz
christchurch.vetlab@gribbles.co.nz
dunedin.vetlab@gribbles.co.nz

Alternatively, you can contact us using our Free Phone number (0800 474 225) or by using the online enquiry service, available through the Gribbles Veterinary website: www.gribblesvets.co.nz

Last but not least, please feel free to contact your local Business Development Manager:

Lyndall Clarke (North Island) - 027 476 7714
Jack Gillman (South Island) - 027 476 7713

Breaking news

- We are delighted to announce the appointment of Bernie Vaatstra to the position of Intern Pathologist at our Palmerston North laboratory. Bernie was the recipient of the inaugural Gribbles Veterinary-IVABS Masterate Scholarship in Veterinary Pathology and now joins Gribbles Veterinary where he will work towards American College of Veterinary Pathologists Board Certification.

- Our new hygiene monitoring service for veterinary practices has been extremely well received by clinics the length and breadth of the country, and we are delighted with the positive and proactive approach that so many of you have taken with respect to minimizing the potential for hospital-acquired, or nosocomial, infections. If you haven’t signed up yet and would like further information, please contact your business development manager or your local laboratory.