

THIAMINE DEFICIENCY **CARE WITH VACCINES HEALTH & SAFETY** SOME PHOTOS BY RICHARD HILSON

RICHARD HILSON

PLEASE TAKE CARE WITH VACCINES: DON'T BE GRUBBY!

This is a timely reminder about cleanliness and safety with vaccines for livestock, in case you had been getting complacent. If you care to read the label of your production animal vaccines, much of which we tend to take for granted, you may be surprised to see that most have quite short periods for their "broached vial" claims. Sometimes as little as ten hours, up to several weeks.

Vaccines must be manufactured to very stringent standards and it is imperative that they reach you in good shape, with careful cold chain management and always safe to use. What happens beyond the point of sale is out of the animal health company's control, and that is where you should be aware of some of the issues with the handling of your vaccines.

Cleanliness is important in surgery and you would take that for granted- for you or your animal, in a hospital or a vet clinic. You would also expect your flu vaccine to be safe to go into your arm or that your kids will get a sterile measles vaccine. We need to take care with animal vaccines too and therefore you need to take care of the vaccine.

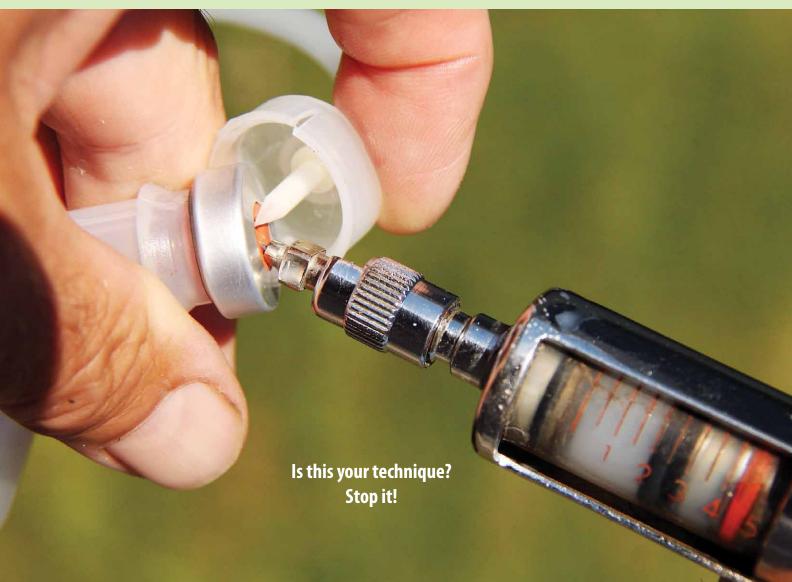
We all use clean and sharp needles, replacing them often and regularly, paying attention to vaccination technique and avoiding injecting wet animals. But how careful are you with your handling of vaccination draw off tubes and part used packs of vaccine? Vaccines contain substrates that were used to grow viruses and bacteria during the manufacture process so it is really important that you do not add any unwanted bugs into that brew. Even in cold temperatures (the vaccines fridge in the shed), some bugs can still proliferate and the effects of that can

be catastrophic when a contaminated vaccine is used- abscesses, ill animals, dead animals.

How are you likely to contaminate the vaccine? The most likely method will be using a draw off tube on several packs in succession as each handling of that set carries risk that you will get bad bugs on the spike of the draw off tube or the cap of the pack. This alone is not a disaster but if you have a part pack left over and choose to leave it for even a few days in the fridge, you should expect the bugs to get growing. So use one draw off per pack and make sure that part packs are either discarded (ideal but somewhat wasteful) or have had a new tube attached when first broached.

A second filthy method that I have seen, quite frankly horrifies me. Do not try to save money or product by injecting the remnants of vaccine in the vaccinator or draw off tube back into the pack as there is huge risk of pushing a myriad of bugs in from the needle which has just been pushed through a few fleeces. Having seen this done and being assured that it is not uncommon practice, I am somewhat amazed that we don't see more issues with vaccine contamination. Any vaccine handled in this manner should be discarded immediately.

As vets we can appear rather obsessed with hygiene at time but lives do depend on it. The correct handling of vaccines is important for vaccines to be effective and for animal safety too. If you would like to revisit how you handle your vaccines (or any animal health product, for that matter), please ask one of our vets to run through a few guidelines with you.



Thiamine is one of the B group of vitamins that is essential for normal functioning of the ruminant brain. Thiamine deficiency is something we see commonly throughout Hawke's Bay.

The reason for this is the rapid turnaround in feed quality that we see in the district, is often the result of drought followed by incredible grass growth once the rain comes. However thiamine deficiency is also seen commonly when diets are suddenly changed such as when stock are put onto a crop over summer or winter.

In a nutshell, thiamine is produced by the bacteria in the rumen and this B vitamin then enters the bloodstream where it plays a vital role in helping the animal produce glucose. Glucose is essential for normal brain function in all classes of stock and without this energy source the brain literally starts to die. We see this in the symptoms of thiamine deficiency which commonly present as animals becoming blind and staggery. This can progress rapidly to no longer being able to stand and in turn in the end stages of the disease the animal can be seen paddling on the ground with an arched neck as though staring at the sky hence the term "stargazer" for such afflicted animals.

So why the link to a change in feed or feed quality?

This is easily explained by the impact a feed change has upon the bacteria in the gut. Sudden feed changes affect gut acidity levels which in turn can disrupt bacterial populations drastically. With a disrupted gut bacterial population disrupted thiamine production follows and in turn the symptoms described above.

Rapid treatment is essential and consists of intravenous or intramuscular doses of B1 (thiamine). Several treatments may be necessary and often an animal can recover only to be left with residual blindness.

Unfortunately prevention and control are not easily instigated as thiamine is water soluble and doesn't hang around in the body long. Trials using injections in the face of an outbreak have shown a reasonable level of success but it is very difficult to predict how and when those feed quality issues arise.

Vigilance is the key and no more so than when transitioning animals onto a crop. Keep a good eye out for wobbly animals and animals that become recumbent but also be aware that the condition can occur once animals have had time to adapt to the crop if crop quality suddenly changes.

Supplementary hay or baleage may help stabilise bacterial populations whilst on the crop as well as providing crucial fibre.

If you see any suspicious symptoms of thiamine deficiency do not hesitate to act fast and contact us at the clinic.



Introducing DAVE WARBURTON

CAMILLE FLACK

Dave is a new addition to our large animal team in Hastings. He joins us after leaving Mount Linton Station, Western Southland, where he was hands on managing the sheep genetics programme.

Previously Dave has worked as a Vet for eight years in Hunterville, a stint in Montana USA as a ranch hand and four years as a Vet in Rotorua.

Dave is married to Rebecca, a farming business coach and Farmax consultant and they have



two young boys, Max and Sam.

Dave is keen on hockey having played and coached for many years. He has a genetics addiction also owning a Angus and Hereford cattle stud and is a follower of horse racing.

The Warburton's are looking forward to milder winters, but even better summers than Southland.

Congratulatons to



Stacey Miller who won the stunning silver bangle by the Cambridge Collection for purchasing our equine drench special at the Horse of the Year last month. (We have a limited amount of stock at those special prices . . . give us a call.)



CAROLINE ROBERTSON

HEALTH AND SAFETY ON THE FARM



A lot of people have different opinions on the new Health and Safety Regulations but I think we can all agree on one thing: we all want whoever is working on our farms to go home safely to their families at night, regardless of whether it's you and your family, your employees or contractors who come and go on farm.

Getting started on a health and safety plan is the hardest and the most important thing for all of us as we develop safety management systems.

A farm health and safety management system is not as simple as just "buying a piece of paper" and you have covered your responsibilities. It is about getting yourself and your staff to think differently and together about the things done every day and making changes to ensure everyone can do their job again tomorrow, free of injuries. We are working hard on this at Vet Services too.

Having been involved in developing both the VSHB Health and Safety management system and one for our family farm, I recommend the best way to start is by writing an index and working your way through it step by step. Get some help from a recognised expert or others who have already worked through the process. Remember it is a system of continual improvement so although the framework can be completed it needs to be a "living" document that shows how you manage hazards and how you do things on farm, and over time how you have changed the way you operate to reduce risks or eliminate them and make your farm a safer place to be. From an operational point of view you need to acknowledge that a health and safety plan will never be finished, you will always be changing and improving the way you operate and stay safe.

There are great resources available on the Beef and Lamb NZ website which will give you a starting point.

On farm everyone needs to know how to do their tasks or at least have some training. Everyone on farm also needs to think about some of the hazards around the farm. Make a list of these hazards and then think together about how you can do things differently to either eliminate or reduce the risk – this may be as simple as wearing protective gear such as safety glasses or

chainsaw chaps. You also need to think about risks being divided into high, moderate and low risk on the basis of the severity of the outcome and the likelihood of it happening. Vehicles on farm will always be high on the risk list so ensuring that when vehicles are used they are the right one for the job and conditions (towing especially) and that they are well maintained and serviced is really important.

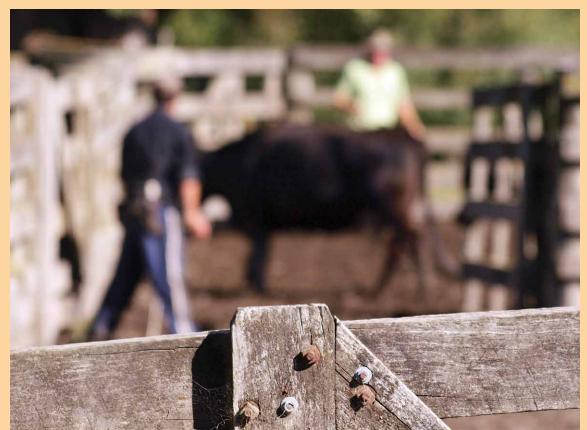
Some examples of high risk hazards include vehicles on farm, four wheelers, side by sides, towing trailers, working alone, emergency situations, tracks and bridges. Moderate risks may include animal injuries, chainsaws and heavy lifting. Low risks could include safe use of equipment such as grinders and welders, but every farm will be slightly different.

There is also a need to have information for contractors that visit your farm to keep them safe. Some of the information in your farm health and safety plan can be used to keep contractors up to date with hazards on your farm. The first step is to identify all the contractors who will work on farm. You will be surprised how many are on the list - vets, shearers, fencers, consultants, transporters, pest control etc. Make sure your contractors are kept up to date.

As a contractor, Vet Services, over all our clinics from Napier to Wairarapa, have only received about 60 farm contractor information packs .We are concerned that our farmers are at riskit's important for you to be compliant and important for us to know that you are. Vet Services needs to make sure our staff are well trained and have the right and safe equipment to do the job and not increase risks on your farm. Likewise you need to ensure that farm staff are well trained and equipment and facilities (including races and yards) are safe and well maintained so as not to increase the risk to your staff and ours.

We are in this together and I am sure we all want the same thing. That is, whoever is working on our farms and in our businesses can do their jobs without injury and can to go home safely to their families at night.

We look forward to receiving a contractor information pack from you soon!



SEASONAL UPDATE

HASTINGS/NAPIER

Yeah it rained!, Not what they thought of it at Horse of the Year, but it's made for some very happy farmers, and stock with full bellies. It always amazes me how quickly Hawke's Bay turns green and lush after rain! Thank goodness it does. Timing of the grass flush should work in most people's favour with tupping upon us

Please be aware of some high nitrate levels in crops after the rain, following drought stress. Always check levels before starting to graze.

WAIPUKURAU

Rams and ewes are either tupping or soon to be and there are smiles on faces with the recent timely rain. The northern North Islanders are dealing with significant flooding, but we are hoping for a follow up of 100+mm of rain over the weekend to solidify the good start to our autumn and get the new grass/crops firing (have pity on the HOY attendees tenting in the mud/rain). The consensus in most areas is that the ewes didn't lose too much condition in the previous dry months, and for scanning results

DANNEVIRKE

What a fantastic autumn we have set up at the moment. Most of the district came through the summer quite well and received good rainfall before any real dry period was able to set in. It is already one of the best autumns we have had in many years. This is great timing as we head into tupping and should mean strong late season milk production for most dairy herds which will be able to catch up some of the losses from early in the season.

So far there haven't been too many animal health issues either. The Facial Eczema risk remains much lower than last year and hopefully the few colder nights we have had will keep this in check.

WAIRARAPA

You will recall the ewe BCS survey we did in December 2016 – 8 of the 11 farms surveyed had at least 50% of their ewes flock with a BCS below 3 at or close to weaning. We followed up on this prior to tupping and at the time of writing, most of the farmers had managed to significantly improve ewe BCS. Most had made a conscious effort to condition score their ewes and separate out the poorer ewes for preferential feeding. In some cases they had also put weight on ewes by feeding kale crops, plantain/

CLARE RYAN

The facial eczema levels are still being monitored closely with some areas being very hot even though we have had a run of cold nights. If you at all concerned check out our website for levels closest to your area or bring in your own grass samples for testing.

We are happy to welcome a new production animal vet, Dave Warburton, to the Hastings clinic and I'm sure he will get around to meeting all of you soon. We also welcome our new large animal receptionist Holly Spurrier who will help you with all your large animal bookings and gueries.

MIKE CATLEY

I hope this is largely true. Consider for future years, what would have happened if you weren't planning on feeding supplements and the dry continued? Facial eczema, worms and staggers are at the forefront of minds with some high and dangerous counts surfacing – FE affects calves and adult animals just as much as hoggets. Keep a close watch of the monitor farm results on our website and please call us to discuss your plans now!

TIM HOGAN

The most serious issues have been fly related. Sheep were getting struck really aggressively,early in the month. I even saw a few cows that were struck, which doesn't happen very often! Biting flies have also been getting stuck into cattle lately. Make sure you come in and talk to the team about the best solution if you're not sure of your options here.

Watch out for the risk of salmonella, particularly in ewes, which was a feature last time we had feed at this time of year. The worm challenge may also build as the favourable conditions continue.

Enjoy the season while it lasts, winter will soon be here!

STUART BRUERE

clover and, in some cases, grain. The pre-tup BCS data will be published in the next newsletter. We are keen to follow this field observation over a period of twelve months so we can better understand the dynamics of ewe BCS over time/season. The rain delivered in February and March has ensured we will experience a much more positive winter in 2017. If you are experiencing any animal health issues and require assistance please give us a call.

OUR VET TEAM

Napier & Camille Flack, Clare Ryan, Dave Kruger, Dave Warburton, Helen Crawford, Helen Hastings: Taylor, Ian Leadbetter, Mark Matthews, Neil Stuttle, Rachel Griffiths, Richard McKenzie, Roger McKinley, Stuart Badger, Veronika Pipe and Vicki Gilchrist.

Waipukurau: Annelise Enslin, Anyika Scotland, Caroline Robertson, Geert Gelling, Harry Whiteside,

Kathryn Sigvertsen, Lucy Dowsett, Mike Catley, Mike Fitzgerald and Richard Hilson.

Dannevirke: Corinna Minko, Ingrid Meijer, Johnny Atkins, Kate Matthews, Simon Marshall and Tim

Hogan.

Masterton: Elke Blommers, Jacques Van Zyl, Louisa Broughton, Nicola Haglund, Sandy Redden,

Sara Sutherland, Sarah Wolland and Stuart Bruere.



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