



# Seven shots for a healthy herd

BY: SHERYL HAITANA

**V**accinations are similar to insurance and farmers will either be risk adverse, or more willing to take risks, Taranaki Veterinary Centre chief executive Stephen Hopkinson says.

“Some farmers are risk-averse and insure themselves for everything. While other farmers will want to assess that risk and they can talk to a veterinarian and talk about their options.”

Vaccinations such as for Leptospirosis

should be compulsory on farms because of the risk to human health, or clostridial vaccinations should be a must for all farmers because they are cheap and prevent a range of relatively common, untreatable and fatal diseases.

However, the need for other vaccinations such as BVD (Bovine Viral Diarrhoea) will depend on the farming operation, he says.

If a farm is a closed system, with young stock grazing on the home farm, or the farmers’ own runoff and not mixing with other animals, it reduces the chance of the herd becoming infected with BVD.

The decision around vaccinations such as Salmonella and Rotavirus will be based on a farm’s experience and history with outbreaks or the risks of an outbreak occurring.

What one herd may need may not be the same as another herd, so a farmer needs to work with a veterinarian to develop an annual herd health management plan. The plan should cover each class of stock on the farm (eg: calves, young stock, cows), what is needed in the way of vaccinations, drenching etc, and what routine testing should be done to monitor animal health (eg: bulk milk BVD testing, blood samples for mineral status analysis, spore counts for facial eczema monitoring etc).

A range of vaccines are on the market, and it’s best to talk to your veterinarian about the best product to use.

If farmers are concerned about the independence of their veterinarian’s advice, they should speak with the veterinarian about it, New Zealand Veterinarian Association’s Ash Keown says.

“Veterinarians can (and should) be challenged. Farmers are also welcome to request a written authorisation to get a product supplied elsewhere.”

## BVD

**Average price:** \$7-9.00/dose

**Animal Class:** Calves and heifers. Adult cows’ annual boosters if indicated. Bulls used for mating.

**Timing:** Cows should be given an annual booster vaccination to protect against the Bovine Viral Diarrhoea virus in both cows and their foetus. This booster should be given about four weeks before mating.

**Recommendation:** Strongly recommended if calves are away grazing or infection identified onfarm.

**Information:** BVD is a viral disease carried by persistently infected animals that show no signs.

Infection in young calves can cause a diarrhoea outbreak and weight loss, but in adult animals, infection often results in poor mating results, abortions and the birth of weak, deformed or more persistently infected animals. Vaccinating calves that are going away grazing is strongly recommended because they are mixing with other stock usually from unknown origin and BVD status including bulls bought for mating. The virus is relatively common but routine testing and monitoring is not. Prevention of BVD outbreak is far better than trying to treat one.

## CLOSTRIDIAL DISEASE

**Average price:** \$1-2.00/dose depending on number of strains covered

**Animal Class:** Calves

**Timing:** from two weeks of age (give at time of disbudding)

**Recommendation:** Very strongly recommended

**Information:** All farmers should be giving calves a vaccination to prevent clostridial disease, such as blackleg and tetanus, which often cause sudden death in young stock.



**Above:** Nicola Neal, vet from North Otago, vaccinates stock on her and husband Grant’s farm.

## PINKEYE

**Average price:** \$5.00/dose

**Animal Class:** mostly calves and heifers

**Timing:** Best results two injections four weeks apart prior to expected infection.

**Recommendation:** If you have a history of previous outbreaks or sometimes in the middle of an outbreak.

**Information:** Pinkeye is a bacterial infection of the eye. Initial signs are excess tears and conjunctivitis but this can quickly spread to infection and ulcers of the cornea. It can spread relatively quickly through a mob of young stock. The vaccine is best used as an outbreak prevention but can be used in the face of an outbreak to slow the spread.

## LEPTOSPIROSIS

**Average price:** \$2-3.00/dose

**Animal Class:** All stock

**Timing:** Calves two injections before six months of age. Cows should be vaccinated annually in autumn before the winter risk period.

**Recommendation:** Highly recommended

**Information:** This disease is critical to control because of its risk to human health. It is passed primarily through urine and can easily be passed to anyone working with cows (farmers, vets, meat workers). Farmers can work with their vet to become trained to give lepto vaccinations.

## ROTAVIRUS

**Average price:** \$7-9.00/dose

**Animal Class:** Cows

**Timing:** Pregnant cows should be vaccinated about three weeks before calving, so calves can receive protection through colostrum.

**Recommendation:** Recommended for best practice calf rearing.

**Information:** By vaccinating the cows prior to calving, you boost the antibody levels against rotavirus several hundred-fold in the colostrum that the new-born calves receive. Rotavirus outbreaks in calves can be devastating and expensive to treat. There are certain management practices that must be adhered to so that the full benefits of the vaccine are received.

## SALMONELLA

**Average price:** \$2.00/dose

**Animal Class:** Calves out grazing, all stock with annual boosters.

**Timing:** Unvaccinated cows should be given their first vaccine then boosted four weeks later. The annual booster vaccination should be given three or four weeks before calving to allow protection of new-born calves via colostrum. If

calves receive colostrum from vaccinated cows, their first vaccine should not be until they are eight weeks old. Otherwise calves can be vaccinated at any age, with a booster vaccination four weeks later.

**Recommendation:** Only if indicated by previous infection.

**Information:** Salmonella is a bacterium that can be carried in the gut of cows or other animals such as ducks and pukekos, but can also survive in damp swampy ground for many years. It's recommended to vaccinate if farmers have experienced an outbreak in the past or calves are grazing on a property that has had an outbreak previously.

There has been an increase in salmonella outbreaks in calves, Stephen says. If cows have been vaccinated, calves will get some protection against salmonella, but most outbreaks seem to occur when calves are older. The vaccination can be given to calves at a young age.

## VITAMINS

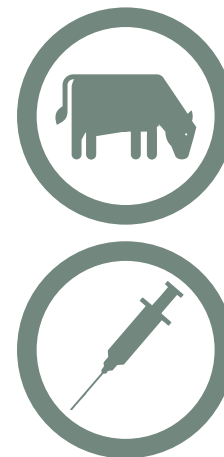
The two most common vitamins farmers are using in their herds are Vitamins B12 and D.

Farmers can check liver samples to see if they need a more formal plan to make up for cobalt deficiency, which is used to make B12 in the cow's rumen.

Vitamin B12 is a cheap product farmers can buy if their farm is cobalt deficient, Stephen says.

"There is also anecdotal evidence that injecting B12 can temporarily increase appetite, which can make a good booster around calving," he says.

Vitamin D can also be used during winter to increase calcium absorption in cows. Vitamin D is more expensive to use on every cow. However, strategic use on cows that might be prone to milk fever can be a good idea.



**Below:** Decisions around vaccinations will be based on a farm's experience.

