Fast-growing animals, especially those grazing redeveloped pasture, intensive feed systems (chicory or high sugar grasses), or switching to supplements or crops, are at high risk of sudden death syndrome. With the current focus on increasing growth rates to meet recommended target weights for mating through both improved genetics of stock and use of new types of feed, this means that stock are more valuable and losses are more costly.

‘Sudden death syndrome’ describes these unexplained deaths. They are often very difficult to diagnose, other than clinically they are often the best stock found dead.

POSSIBLE CAUSES OF SUDDEN DEATH IN DAIRY HEIFERS:

• Clostridial diseases (including tetanus, black leg, malignant oedema and ‘sudden death syndrome’
• Bloat
• Toxic plants
• Lead poisoning (other heavy metals)
• Peracute pneumonia
• Intestinal/organ twists
• Accident/trauma
• Acute Salmonella

There are other causes of deaths such as parasitism or BVD, but most often these animals show symptoms before dying. They are not usually just found dead in the paddock. Annoyingly with clostridial disease, the animals with the best growth rates and hence the best individuals are often the ones found dead! It’s not often the small tail-end ones.

DO YOU:

• Have any unexplained sudden deaths, especially in young fast-growing stock? (even despite using traditional 5 in1 vaccines)
• Excellent growth rates?
• Send replacements away on grazing schemes for high growth rates?
• Use chicory, red clover or high sugar grasses?
• Feed stock on crops?
• Supplementary feed with grain, nuts, etc.?

If you have answered yes to any of these, then your cattle may be at risk of clostridial diseases. Increasingly we hear of sudden death from clostridial diseases not covered by traditional 5 in1 vaccines among young fast-growing animals. This is often due to the problematic C. sordelli and C. perfringens Type A.

CLOSTRIDIUM PERFRINGENS TYPE A

In New Zealand, a survey isolated C. perfringens (mostly Type A) from soil over a wide range of sites in pastures, gardens, swamps, orchards, and roadsides (Bacon cited by Gardner 1990). Furthermore, it is virtually impossible to find mature cattle or sheep in New Zealand that are serologically negative to Type A (O’Connell 2002).

The most common and well recognised disease process associated with C. perfringens Type A is sudden death syndrome of sheep and cattle.
WHAT CAN BE DONE?

Vaccination with Covexin® 10 provides protection against these puzzling and annoying deaths. This is the premium clostridial vaccine for farmers of:

- Stud, pedigree and/or stock of high genetic value
- Stock reared on high in-put farm systems (i.e. high levels of supplement feed)
- Top producing herds
- Fast-growing stock
- Stock with increased clostridial “risk factors”.

This vaccine, researched, developed and manufactured in New Zealand gives cover against 10 clostridial organisms, including the problematic C. sordellii and C. perfringens Type A implicated in the sudden deaths.

A low dose volume (2mL for cattle), irrespective of age or size, results in protection that lasts at least 12 months, making it considerably easier to plan herd vaccination.

As the first weeks of an animal’s life are especially risky, if no maternal protection is available through pre-calf vaccination and colostral immunity, calves can be vaccinated from as young as 2 weeks of age.

SUGGESTED VACCINATION PROGRAMME:

<table>
<thead>
<tr>
<th></th>
<th>1st vaccination</th>
<th>2nd vaccination</th>
<th>Annual booster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calves from</td>
<td>From 2 weeks of age (calf debudding)</td>
<td>4-6 weeks later</td>
<td>Revaccinate at 14-16 months of age</td>
</tr>
<tr>
<td>unvaccinated cows</td>
<td></td>
<td>(at weaning)</td>
<td></td>
</tr>
<tr>
<td>Calves from</td>
<td>8-12 weeks of age (weaning)</td>
<td>4-6 weeks later</td>
<td>Revaccinate at 14-16 months of age</td>
</tr>
<tr>
<td>vaccinated cows</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant Dairy Cows</td>
<td></td>
<td></td>
<td>2-6 weeks pre-calving. This should protect calves until 8-12 weeks of age (weaning)</td>
</tr>
</tbody>
</table>