

Inside every calf lies a lifetime of productivity

Managing respiratory health
of young beef suckler calves
for optimal performance



Rispoval[®]
IntraNasal

Release their potential

Take pride in early protection for lifetime productivity

- Performance of the young suckler calf can determine its lifetime productivity
- Performance is affected by genetics, nutrition and health, with respiratory infections being one of the most common health problems in young calves
- All herds are at risk of respiratory infections, so protecting the young calf as early as possible helps ensure it can reach its full potential
- Early vaccination can help maximise lifetime productivity, making it a good financial investment
- Vaccination is an integral part of good farm management

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Performance of the young suckler calf can determine its lifetime productivity

The respiratory health of young suckler calves born from late autumn through to early spring is very vulnerable – born just before or during the high risk winter housing period, they mix immediately with older animals, potentially exposing their immature immune systems to a number of infectious agents.

Early spring born calves can also be at risk following turnout. Although pneumonia is most common in housed animals, it can also be seen at grass in these young vulnerable calves.

Studies have shown that the first few months of a calf's life are critical to its future growth.¹ The effects of factors that 'knock back' the animal in the early stages of life can continue to be felt as the animal grows, so you can't always just rely on them to 'catch up'.

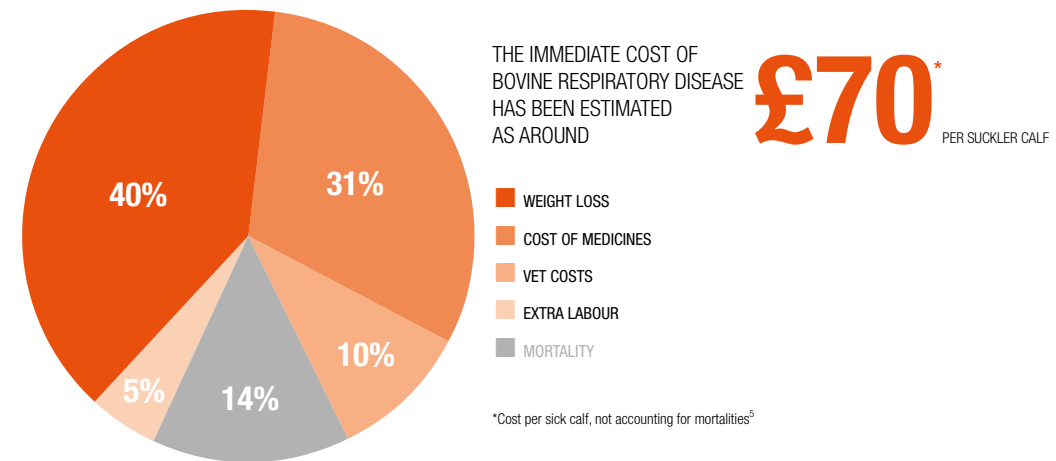
Careful, proactive management of the young vulnerable suckler calf is therefore critical in maximising its future productivity.

Importance of good respiratory health for calf performance

Of the factors that are crucial to the calf's best possible performance, good respiratory health is essential to ensure they grow to their full potential and are able to deliver to their maximum. Respiratory ill-health is common in young calves and all herds are at potential risk. It has been estimated that 67% of cases of pneumonia occur in calves less than 3 months of age.² In addition, some calves will be infected, but not show obvious clinical signs and therefore go unnoticed, but the underlying lung damage can limit growth rates.³



Prevention of clinical cases of pneumonia means significant immediate economic savings for the producer⁴



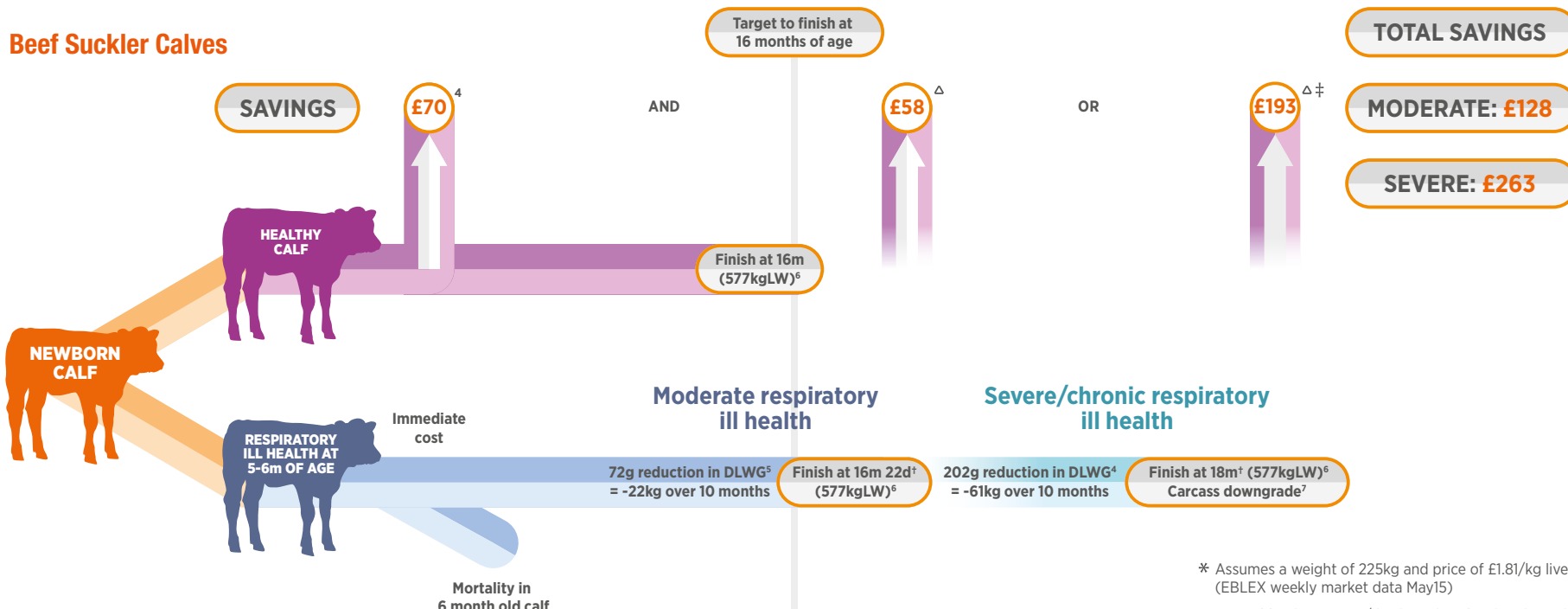
Beef Suckler Calves

A UK study⁵ examining calf lungs at slaughter showed that beef calves with healthy lungs gained 72g/day more than those with moderate lung damage, and 202g/day more than those with severe damage. Based on a 16 month finishing system, and assuming disease occurs at 6 months of age, this potentially equates to a difference in finishing weights at 16 months of 22kg in moderate cases, up to 61kg in severe cases. Carcasses from calves with good respiratory health also tended to grade higher than those from calves with lung damage, meaning not only a potentially heavier carcass, but also a higher price/kg dead weight. These gains are again in addition to the immediate savings from not having to treat cases of pneumonia, estimated at £70 per animal.⁴ For beef suckler calves, protecting calf respiratory health is critical to ensure daily liveweight gain is optimised and carcass quality protected.



Lifetime value of respiratory health

Beef Suckler Calves



* Assumes a weight of 225kg and price of £1.81/kg liveweight (EBLEX weekly market data May15)

Δ Cost of finishing £2.63/day based on fixed and variable costs³ (moderate ill health 22 days x £2.63 = £58, severe ill health 61 days x £2.63 = £160)

† Assumes a DLWG after 16 months of age of 1kg/day

‡ 330kg carcass conformation down grade from R4L to O+4L at -£0.10/kg deadweight (330kg x £0.10 = £33)⁷

Model based on EBLEX target data for a beef calf in a 16 month finishing system



Influences on respiratory health

Respiratory health is influenced by infectious agents and environmental and management factors. The infectious agents include both viruses and bacteria (including *Mycoplasma bovis*) but most outbreaks of pneumonia start with a virus, and in young calves BRSv and Pi3v are two of the most important.⁸ Blood samples taken throughout 2014 from 2271 calves on farms with pneumonia problems showed 76% had been exposed to BRSv and 83% to Pi3v.⁹ The viruses are a very common threat which means that many calves, including yours, have potential to benefit from early and effective protection.

Improving respiratory health

Vaccination

Combined with other measures aimed at ensuring good respiratory health, early protection, through vaccination, against the key viruses should be an integral part of good calf management.

Ensure housing is well ventilated, draught-free, and dry

Good ventilation, driven by the heat generated by the housed cattle, builds a uniform airflow, ensuring excess moisture, heat and dust, gases and germs all escape from the building. If a building is poorly ventilated, the warm air that animals breath out cannot escape, so it condenses and falls, creating the ideal environment for the viruses and bacteria that cause respiratory disease to multiply.

Manage group sizes

More animals means more infectious agents are breathed out, increasing the challenge level, and increased levels of moisture allow bacteria and viruses to survive for longer.



Benefits of vaccination to protect respiratory health

- The potential financial benefits from improvement in lifetime productivity outweigh the initial cost of vaccination
- Vaccination can help maximise lifetime productivity, through reduced losses and improved financial returns
- Vaccination helps reduce the work associated with unplanned treatment and management of calves with poor respiratory health
- Improved animal welfare

For farmers who take pride in the health and performance of their stock, vaccination makes sense

Early, fast protection with Rispoval® IntraNasal

Rispoval® IntraNasal has been specifically developed to give young calves the earliest pneumonia* protection available.

- Earliest protection against the 2 key viruses which cause pneumonia in young calves – BRSv and Pi3v⁸
- Onset of immunity is not affected by antibodies derived from the colostrum
- Use from 9 days of age
- Immunity occurs just 5 to 10 days after a single dose – no other vaccine protects earlier
- Immunity proven to last at least 12 weeks, ensuring calves are protected during their most vulnerable period
- Viruses are at the root of the majority of respiratory health problems; so ensuring early protection will help reduce the threat from secondary bacteria such as *Pasteurella*

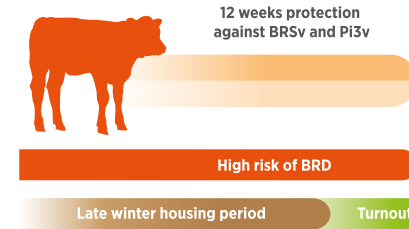
*Against BRSv and Pi3v

VACCINATION PROTOCOL

Late winter/early spring born calves

**Rispoval®
IntraNasal**
RS + Pi3

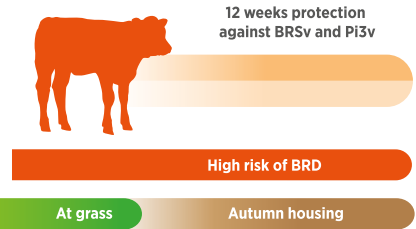
(From 9 days of age)



Autumn/winter born calves

**Rispoval®
IntraNasal**
RS + Pi3

(From 9 days of age)



**Talk to your vet
about releasing
their potential with
Rispoval IntraNasal.**

Use from just 9 days of age



Rispoval[®] IntraNasal

Release their potential



Presentation

A freeze-dried fraction containing modified live Bovine Pi3v, ts strain RLB103, (105.0 to 108.6 CCID₅₀) and modified live BRSv, strain 375, (105.0 to 107.2 CCID₅₀) supplied with sterile diluent. For active immunisation of MDA positive or negative calves from 9 days of age against BRSv and Pi3v, to reduce the mean titre and duration of excretion of both viruses. Do not use during pregnancy/lactation. Vaccinate only healthy animals. On rare occasions repeated exposure to BRSv may trigger hypersensitivity reactions.

Once reconstituted use within 2 hours. POM-V

References:

1. BACH, A. (2012) J Anim Sci 90, 1835-1845
2. ZOETIS market research (2006)
3. WITTUM, T.E. *et al.* (1996) JAVMA 29(4), 814-818
4. ANDREWS, A.H. (2000) Cattle Practice 8(2), 109-114 (cost of disease not including mortalities)
5. WILLIAMS, P.M. & GREEN, L. (2007) Cattle Practice 15(3), 244-249
6. EBLEX Stocktake Cost of Production 2013-2014 - Beef finishing up to 16 months of age (Model and costs based on a beef calf in a 16 month finishing system, with an average finished weight of 577kg LW and 330kg DW.)
7. EBLEX BRP - Marketing Prime Beef
8. GRAHAM, D.A. *et al.* (1998) J Vet Diagnostic Investigation 10, 43-48
9. ZOETIS respiratory serology surveillance scheme January - December 2014 (n=2271)

For further information please contact your veterinary surgeon or Zoetis UK Ltd, Walton Oaks, Tadworth, Surrey KT20 7NS. www.zoetis.co.uk
Customer Support: 0845 300 8034

Use medicines responsibly (www.noah.co.uk/responsible).

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