calf health

Get the basics right for improved calf health

Ensuring the safe delivery and subsequent robust growth of a calf is at the start of every dairy unit's production cycle, says vet **Rob Drysdale**, of Ruminant Health Solutions.

tudies show that dairy herds are still losing too many calves in the birth to weaning period, with BCMS data showing mortality rates in dairy calves at 6% in the first three months of life¹.

"Looking into to the main causes of death and we see that scour accounts for almost 50% of mortality in the birth to six week phase, with pneumonia then becoming a bigger issue post weaning²," says Rob.

"Cases of scour damage the cells lining the calf's gut, which means reduced absorption of nutrients and increased fluid loss. Anyone with calves need to act as soon as a case is seen; left unchecked it could lead to the calf rapidly declining and, in severe cases, death," he adds.

Causes of scour include viruses (rotavirus, coronavirus), parasites (Cryptosporidium, Coccidiosis), bacteria (*E. coli, Salmonella*). Mixed infections are also common and nutritional scour, when the changes to the diet or consistency such as milk feeding is the cause, are more commonplace than may be thought.

A calf-side scour test kit, available from Progiene and its distributors, can detect coronavirus, *E. coli*, Cryptosporidium and rotavirus within 10 minutes. Knowing what you are up against helps with the preparation of a plan and operating protocol.

According to the UK Dairy Biosecurity Survey, which was carried out for Progiene, while 89% of those questioned have a biosecurity protocol, only 8% were satisfied with them, and only 31% followed them.

"A standard operating protocol (SOP) possibly devised in conjunction with your vet and posted on the wall of the milk prep area or calf shed can be an invaluable tool, especially if different people work with the calves from day-today," Rob adds.

[']Good biosecurity underpins health and hygiene but what is biosecurity? It can be explained as a combination of measures taken to reduce the risk of the introduction and spread of infectious diseases," he adds. "This means assessing



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risk and implementing measures to decrease that risk, safeguard and improve health status on the farm."

Calves are born with no immunity, into an environment with a significant pathogenic load, be that in housing or bedding, from the dam or being shed by other calves. However, following a few simple best practice guidelines, can help ensure the calf is not only protected but the risk of creating an infection minimised. "A clean calving pen is essential, as is ensuring the cow has sufficient space and access to water," Rob says. "Following thorough cleansing AND disinfection is key: by removing all organic matter from the pen, pressure washing clean and then using a Defra approved disinfectant. Providing plenty of clean bedding or a spotless calving pen are the basics that ought to take place on all farms.

"Moving on, ensuring the calf gets enough quality colostrum, 10% of bodyweight is the target, in the crucial first few hours of life helps not only provide important early antibodies to help the calf resist infection pressure, but also lots of other essential proteins and fats," he explains. "Your vet may recommend vaccinating the dam to ensure antibodies are passed on to the calf, as well as giving advice on calf health management."

Biosecurity around calves

How do pathogens get to be in close proximity to calves, and go on to lead to disease?

"Bacteria, viruses or parasites capable of leading to scour in calves can be

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According to the UK Dairy Biosecurity Survey, 80% of farmers have a boot dip yet almost half don't require visitors to use it



Good biosecurity underpins health and hygiene, says vet Rob Drysdale

in the environment if it's not been cleaned effectively, can come in on boots or clothing, or can be airborne especially if the airspace is shared with older animals."

According to the UK Dairy Biosecurity Survey, 80% of dairy farms have a boot dip, yet almost half don't require visitors to use it. Worryingly, only 62% change it after 15+ uses.

"A simple foot bath label can help manage this and a record sheet ensures that the right product is used, at the correct dilution and for the right amount of time," he says. "These are often available from your merchant and are simple, quick and easy to use."

Coxicur from Progiene is a Defra approved general order disinfectant for use against bovine tuberculosis, Coccidiosis, Cryptosporidium, viruses, bacteria and mould. It can be used in calving areas, calf pens, on feeding equipment and as a boot dip. It can be used with a pressure washer or as a foam and is low odour, meaning it is a good choice for feeding and water buckets, as well as cleaning teats.

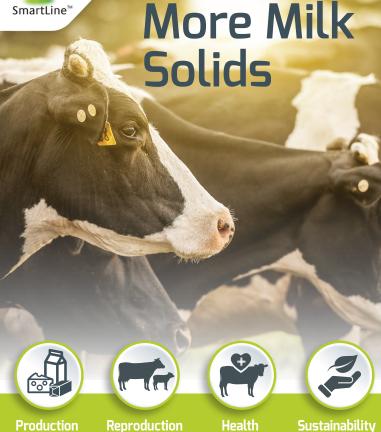
"To improve calf shed biosecurity separate boots and even overalls should be considered as this can help prevent the movement of pathogens from the older stock to the calves. And it is always good practice to ensure all visitors have clean boots on arrival, and dip before even entering the farm. Providing protective overalls and boot covers is best practice," Rob says.

"Cleaning feeding equipment, the milk prep kitchen and water buckets with hot water and the correct disinfectant at the correct dilution rate are critical. A clear SOP that is easy for all in the team to follow can really make the difference," Rob concludes.

References

1. https://pubmed.ncbi.nlm.nih.gov/31954578/

2. https://www.nadis.org.uk/disease-a-z/cattle



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