Fine Tuning
Calf Rearing

#Calfmatters Survey 2020

Protect **Monitor** **Treat**

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#Calfmatters survey 2020 Introduction

This is the fourth year of the survey and we are pleased with the number of responses, 444, which is an increase on previous years and indicates an interest and awareness of calf health, with many responses coming from calfmatters followers.

Dairy farms made up for 54% of respondents with 33% having beef suckler herds only and 7% categorised as having both. Farms with no adult cattle were categorised as calf rearers and accounted for 6% of farms.

Herd size average was 195 adult cows for the dairy herds and 60 adult cows for the beef herd, which is similar to respondents last year. However, this is higher than the average UK dairy herd size of 148[1] and Irish dairy herd size of 79[2] suggesting that farmers who responded were from larger than average farms.

As this is the fourth year of the survey we are able to look over the pattern of responses which, as well as giving us a snapshot of what's happening now, lets us compare with what farmers have said and done in previous years.

Results
How many calves did you treat for pneumonia on your farm in the last year?

Fig 1. Percentage treated for BRD

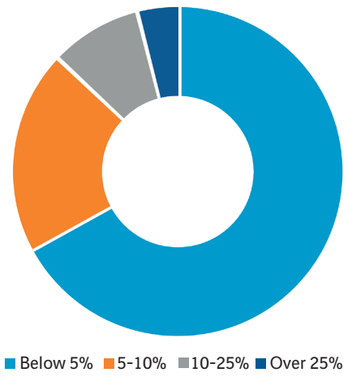
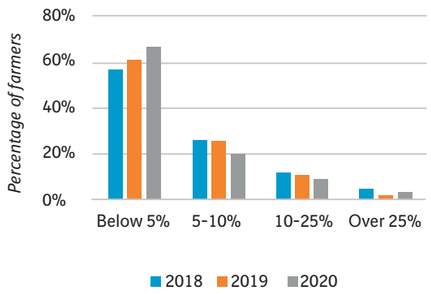


Fig 2. Percentage treated for BRD



Comparing percentage of calves treated for pneumonia across the years suggests an encouraging trend of improvement. This year 67% of respondents stated that they had to treat <5% of their calves and this figure has increased year on year (Figure 2). Those who reported treating over 25% of calves have always been in the minority and this has stayed fairly constant.

Comparing respiratory disease cases to previous winters

Fig 3. The overall number of cases compared to normal was:

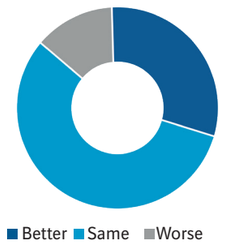
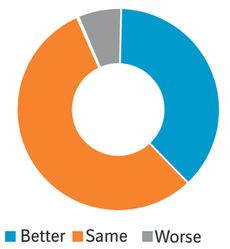


Fig 4. Mortality due to pneumonia was:



The majority, 86% of farmers, said their respiratory disease was the same or better than previous years compared to 87% in 2019 and 77% in the 2018 survey.

What do you think was the main reason for this?

In previous years the most common answer had been that the winter was better or worse than usual and although this remained the most common response, there was a more even spread. In 2020, many saw no perceivable change, but where they did, the most common reasons were weather changes, changes to housing and changes made to colostrum management. The weather is the one thing that the farmer cannot control, but the other factors are manageable and influential. By controlling those factors we can maximise the calves' resilience with the aim of reducing the impact regardless of whatever climatic factors they face.

Fig 5. The main reason for difference seen in 2020

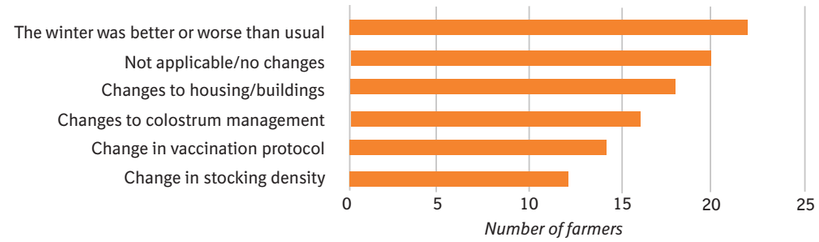
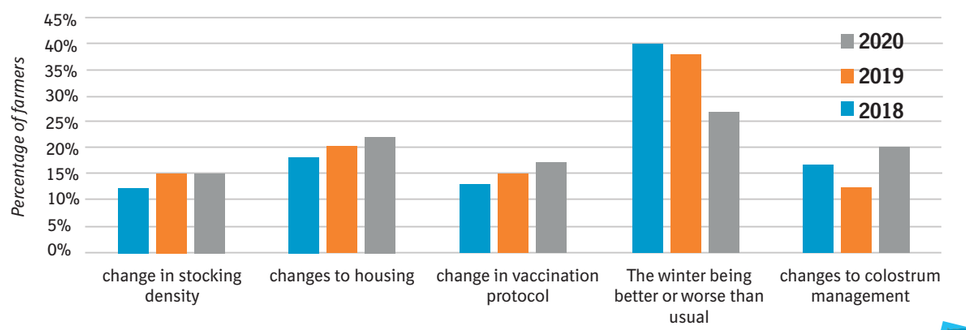


Fig 6. The main reason for a change in BRD



What are the biggest impacts of calf pneumonia on your farm business?

This question has been asked for all four years with fairly consistent responses. Every year the top three responses have been increased vet and medicine costs, loss of income from less productive calves and loss of income from dead/culled calves. It is encouraging to see the industry is becoming more aware of the indirect costs associated with BRD due to the sub clinical impacts on productivity as well as the direct costs such as treatment costs. Increase in stress from BRD has also been shown to be a consistent finding with nearly 40% of farmers in 2020 indicating that this is an impact factor.

Fig. 7 The biggest impact to farms 2020

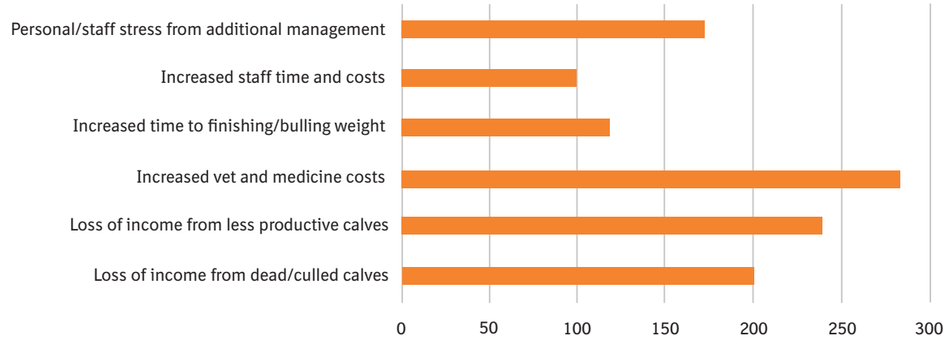
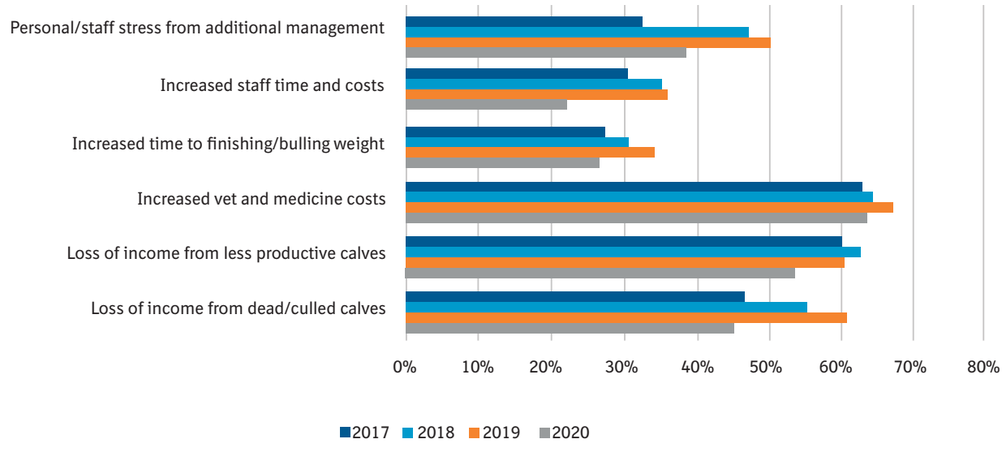


Fig. 8 The biggest impact of BRD to the farm



Which of the following management methods do you currently implement against calf pneumonia?

The most common methods implemented against BRD in 2020 were ensuring colostrum intake, housing calves in similar age groups and providing optimal housing conditions. These responses are fairly consistent over the past four years. However, although colostrum was cited most frequently overall, it's interesting to note that the percentage has decreased from 87% in 2017 to 70% in 2020. Colostrum is the single most significant factor that a farm can influence to ensure that a calf has the optimum start.

It is reassuring to see that group antibiotic treatment for prevention is used by very few respondents and has decreased slightly. However 7% (33) of our respondents indicated that they were using antibiotics for prevention. As perhaps expected, calf rearers were more likely to use preventative antibiotics, 22%, which was higher than dairy (6%) or beef farms (8%). This highlights that farms rearing calves, which are not home bred and are acting as rearers only, are more likely to rely on antibiotics.

There had been a year on year increase in farms using vaccination and, although the 2020 cohort indicate that this is an important method, this year the percentage was lower than 2019 results.

Fig 9. Methods used to reduce BRD in 2020

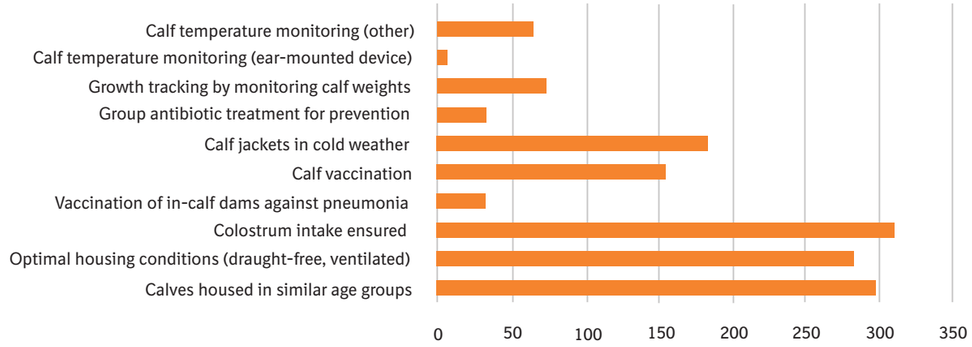
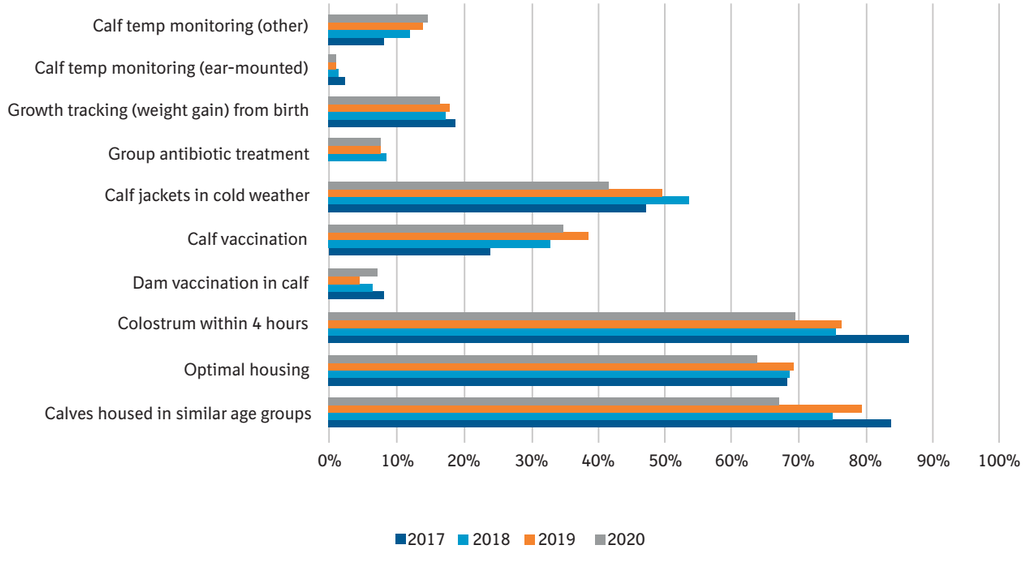


Fig 10. Methods used to reduce BRD by year

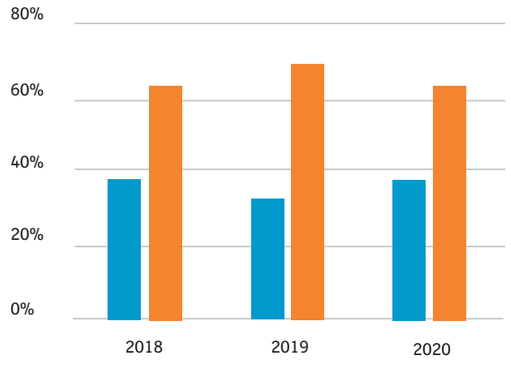


If you give colostrum, do you routinely test its quality?

Although colostrum protocols are in place on many farms, whether these result in adequate transfer of antibodies can depend on various factors including the quality of the colostrum. In 2020, we found that 38% of farms who feed colostrum will also check the quality of their colostrum. This has increased year on year but many farms do not. However, perhaps they are using other methods to monitor their protocols such as measurement of total proteins in their calves.

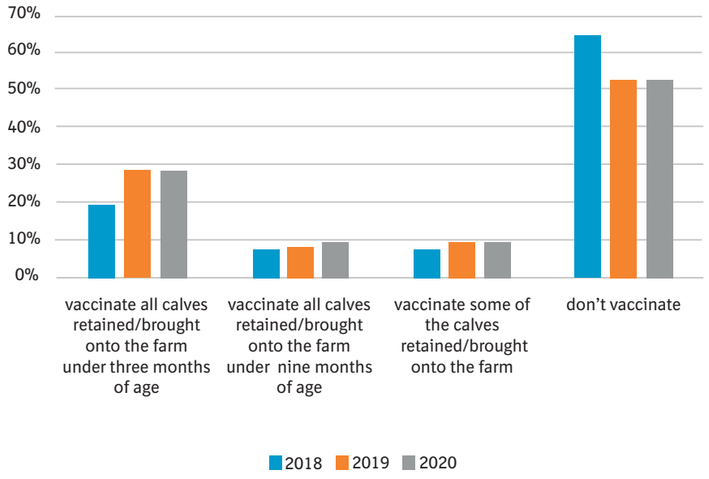
Fig 11. Colostrum testing 2020

Fig 12. Colostrum testing per year



Regarding vaccination, indicate what you do?

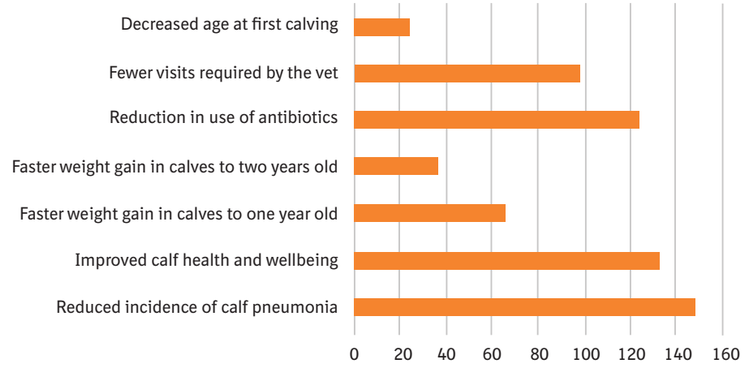
Fig 13. Calf pneumonia vaccination policy



Farms were given four possibilities which allowed comparisons to be made with the previous surveys. It is very encouraging to see that 47% of farms said that they were vaccinating all or some of their calves, which is slightly higher than recent industry figures suggest[2]. There are a lot of farms not using vaccines and with RUMA targeting vaccination use as a method of reducing disease and therefore antibiotic use, it can be expected that this figure will increase in future years.

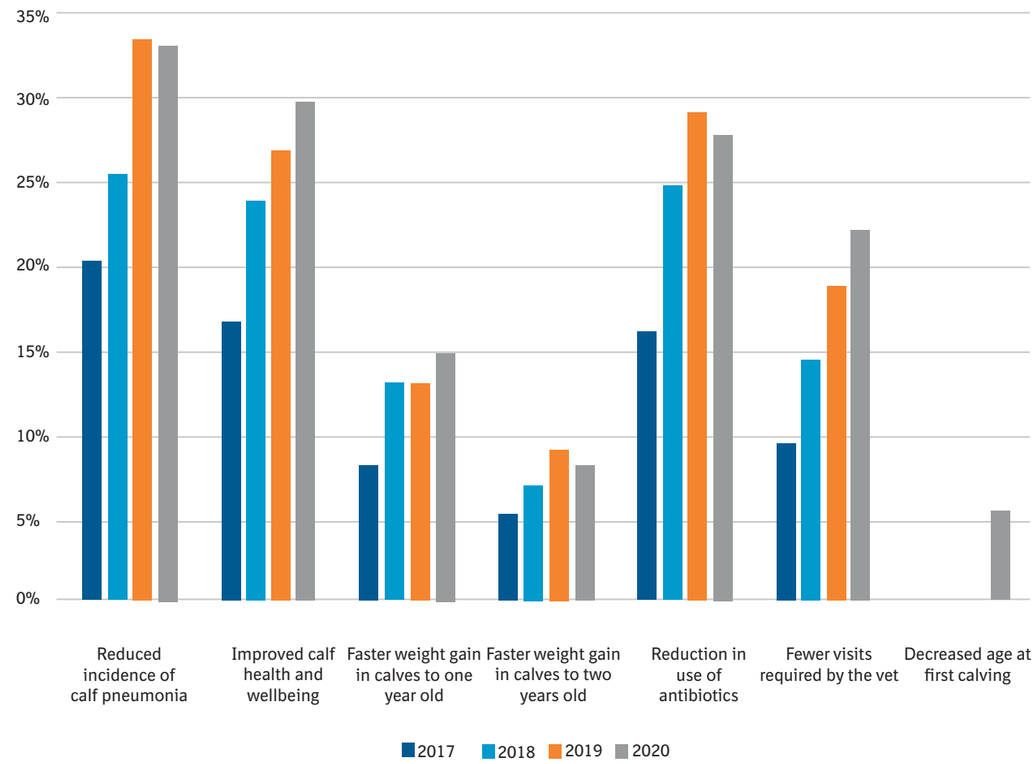
If you have vaccinated calves in the past three years please indicate whether you have observed differences, compared to unvaccinated calves (select all that apply):

Fig 14. Perceived benefits of vaccination 2020



There's been a big drive by RUMA during the past few years to encourage producers to vaccinate, to prevent disease and to reduce the use of antibiotics that are needed to treat sick animals. Producers are seeing the benefits of using vaccination and our survey shows that farmers are increasingly aware of their role in reducing disease, increasing animal health and welfare and in reducing antibiotic use. The results indicate that the use of vaccines is perceived to be related to a reduced need for veterinary intervention and antibiotic use. This all adds up, not just in terms of economic costs, but also in improved welfare for the calves and also the farm staff who look after them. Treating sick animals is not only time consuming and expensive but it is also stressful and demoralising.

Fig 15. Perceived benefits of vaccination 2017-2020



If you do not vaccinate, or have stopped vaccinating calves against calf pneumonia in the past three years, why?

As in previous years, the most common answer was that there was no incidence of calf pneumonia. However, BRD can be clinical and subclinical, with both having an impact on growth rates and production. It is interesting that relatively few farms monitor growth rates, which are reduced by BRD. It is very possible that on farms who apparently see “no disease” that they are dismissing coughing calves as “one of those things”, when in fact they may be an indication of underlying group disease. Fewer respondents said they were unsure of the benefits of vaccination in 2020 compared with previous years. This is likely associated with both increased awareness due to industry messages and campaigns, and the fact that more farms are vaccinating and seeing the benefits first hand.

Fig 16. Reasons why farmers stopped vaccinating 2020

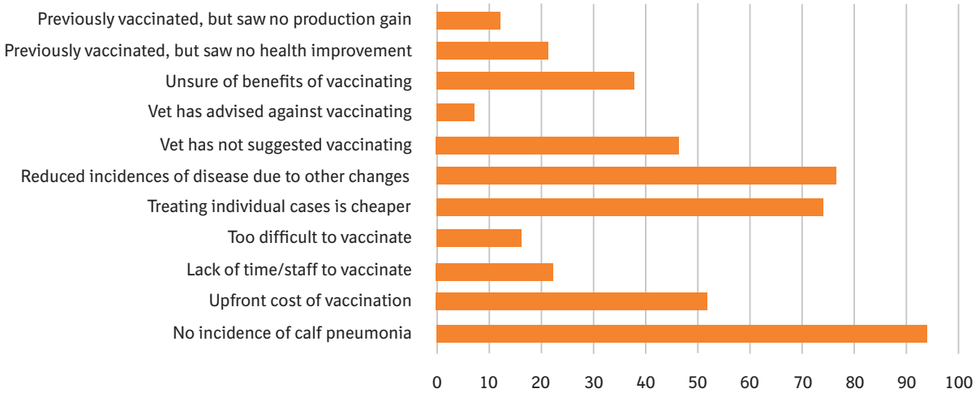
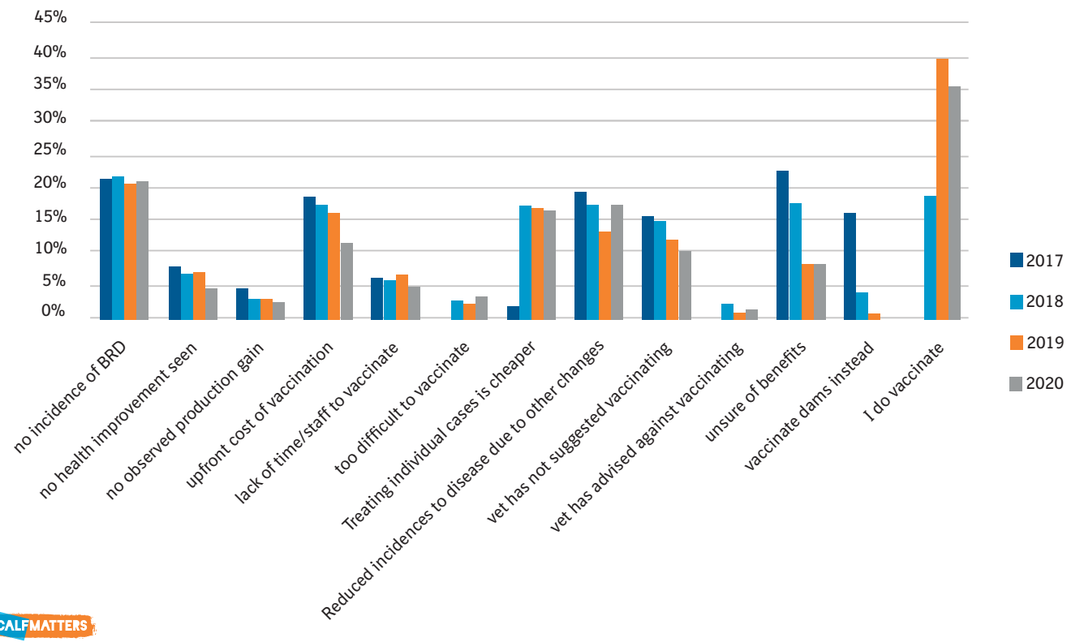


Fig 17. Reasons why farmers stopped vaccinating - by year



What measures do you plan to use to prevent or identify calf pneumonia in calves next winter?

Our farmers were asked about what they had done this year, but also what measures they would take in the next winter to improve their calf rearing system in terms of BRD. The top answer was to house calves in similar age groups, followed by monitoring colostrum intakes, and monitoring calf housing conditions. There is awareness that mixing calves of various ages poses a risk and that may also be part of the reason why monitoring and improving calf housing were priorities. In addition, the proportion who intend to monitor has increased over the last few years, which may suggest that farms are looking at measuring changes and that benchmarking and data analysis is becoming more commonplace in calf rearing.

Fig 18. Measures to reduce BRD in future - 2020

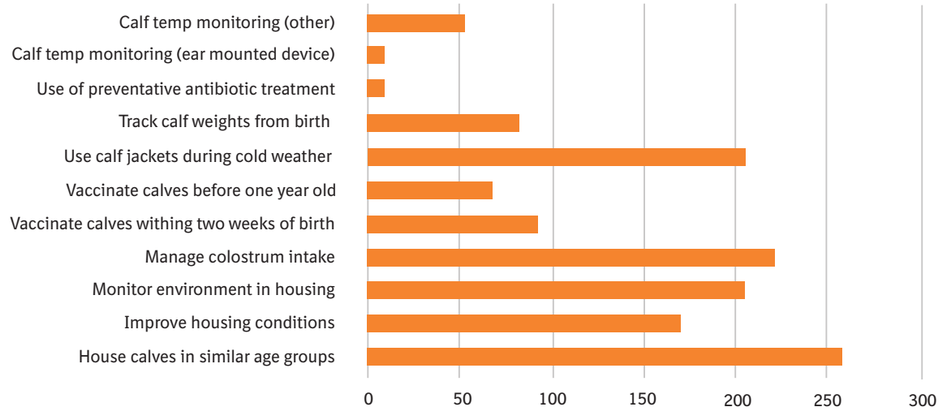
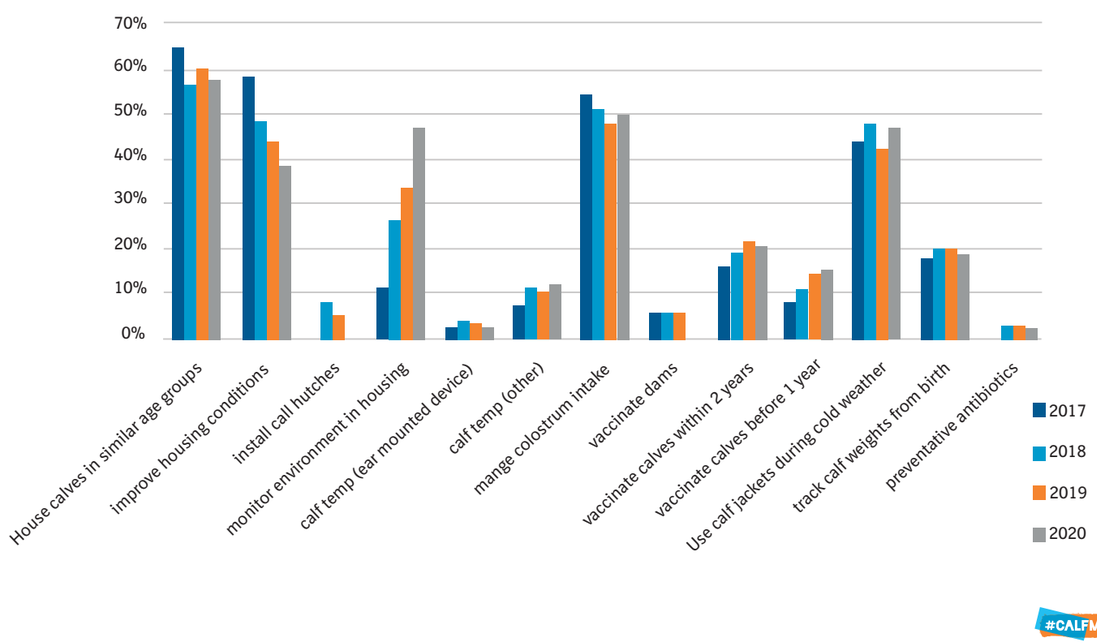


Fig 19. Measures to reduce BRD - by year



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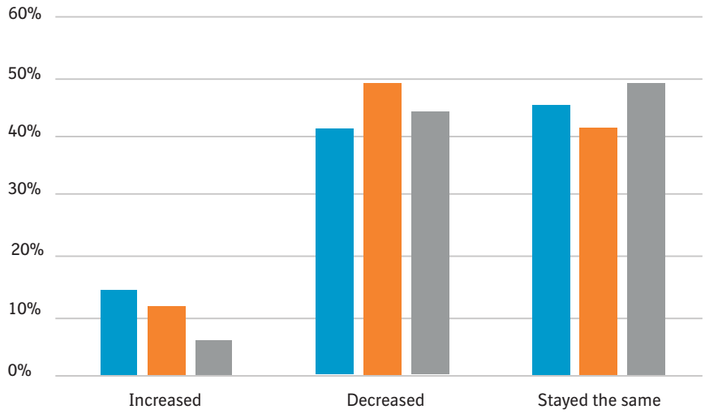
During the past three years has the amount of antibiotics used to treat calves changed?

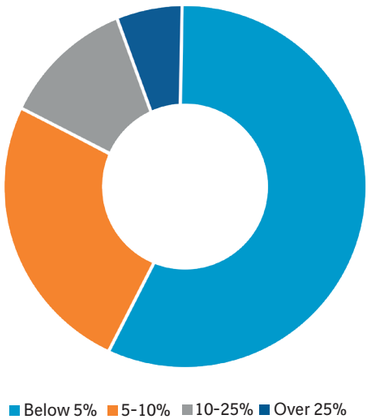
Fig 20. Amount of antibiotic used to treat BRD



The proportions have stayed relatively similar, but there is an interesting trend indicating that farms are seeing a decrease in the amount of antibiotic used. Caution should be taken in interpretation, but this would be in line with what is being seen within the industry and suggests that the calf health antibiotic hot spot is being addressed by farmers. Again, we are aware that our survey represents a small subset of UK farms and that our findings may not reflect all farms, especially if our study population is more proactive and concerned about calf health.

What proportion of your calves have shown evidence of calf scour in the past year?

Fig 21. Proportion of calves shown evidence of calf scour in past year



The majority of farms, 87%, reported that less than 10% of their calves showed evidence of scour, which is similar to previous years. The percentage with over 25% of their calves affected was 5%, which equates to the finding from 2019 and lower than the 9% reported in 2018.

Percentage Calves with Scour	2018	2019	2020
below 5%	51%	58%	57%
5-10%	27%	29%	26%
10-25%	13%	8%	12%
over 25%	9%	5%	5%

Which of the following do you use to treat cases of scour on your farm?

Fig 22. Scour treatment options 2020

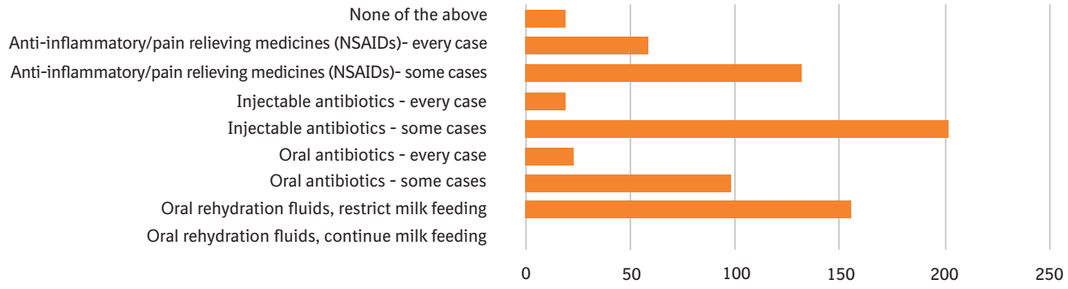
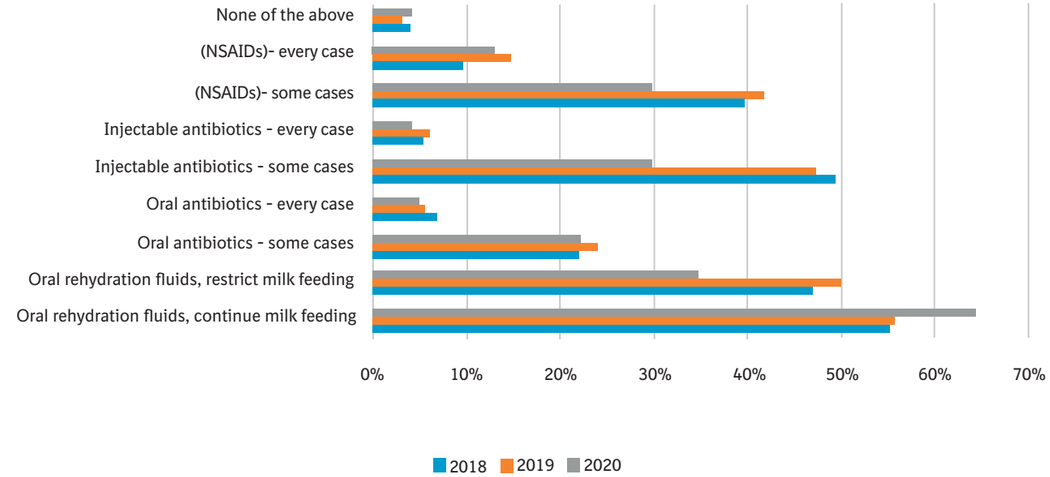


Fig 23. Scour treatment options by year



Scour is one of the most common disease syndromes in calves, with a variety of causes. The most common causes are unlikely to be bacterial and this reflects treatment, which regardless of cause involves keeping the calf hydrated. Effective oral rehydration therapy (ORT) aims at correcting dehydration and electrolyte loss in order to support the calf while its immune system deals with the cause. Nearly all, 99%, of farmers included oral rehydration in their protocols, with a mix between those who would restrict milk and those who continue to feed milk. A review of the previous survey findings, shows that the balance is swaying in favour of continued milk feeding and nearly two thirds follow this protocol compared with just over half in 2018. Historically, it was common to restrict milk to scouring calves, but now it is standard recommendation to continue to feed milk or milk replacer along with oral rehydration fluids. ORF was originally developed for human medicine and is credited as one of the most important advancements of the 20th century. There are various products on the market therefore this is an area where a review of both your chosen ORF and your treatment protocols with your vet would be worth considering.

Common causes of scour are cryptosporidium and rotavirus, one is a parasite and the other a virus, which do not respond to antibiotic therapy. There are other causes where antibiotics are indicated, but often they are not required in the treatment of scour. The proportion of farms using oral or injectable antibiotics has stayed relatively constant, but there does seem to be a hint from the results that antibiotic use is following a downward trend.

Interestingly, NSAID use in scouring calves seems to be declining with 43% of farms stating that they use them in some or every case, compared to 50% in 2018. Metacam® is an example of an NSAID, which is licensed for use in scouring calves and studies have shown that inclusion has a beneficial effect with treated calves having a faster and more pronounced recovery[4]. NSAIDs should be used along with rehydration therapy.

On your farm which of the following procedures do you routinely give (NSAIDs) as well as local anaesthetic for?

Fig 24. Painful procedures where NSAID analgesia provided - 2020

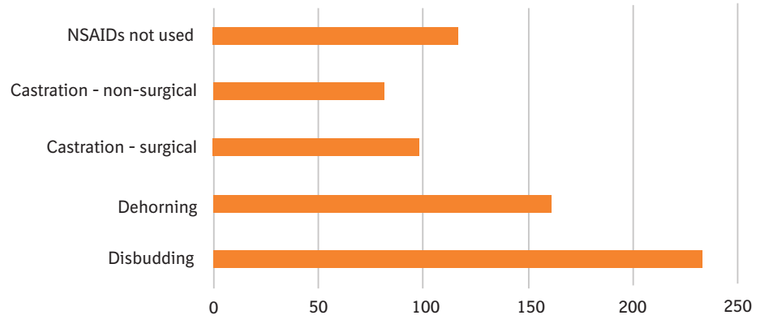
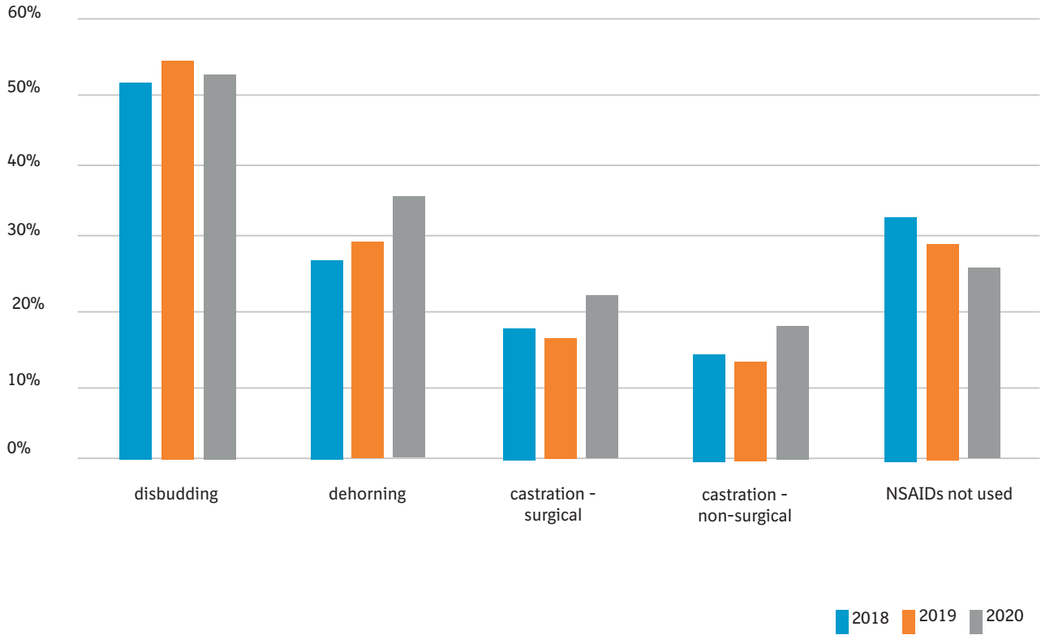


Fig 25. Painful procedures where NSAID analgesia provided - by year



It is encouraging to see that 74% of respondents use non-steroidal anti-inflammatory drugs (NSAIDs) for one or more procedures and this is an increase of 7% over the last two years. Both the BCVA (British Cattle Veterinary Association) and the BVA (British Veterinary Association) recommend the use of an NSAID in addition to local anaesthetic when carrying out disbudding, dehorning and castration[6]. Despite this, there are still nearly 50% of farms not using an NSAID to complement local anaesthetic for disbudding. Studies show that calves given meloxicam (Metacam) at disbudding have a greater feed intake, resulting in extra weight gain in the 10 days following the procedure[7] as well as reduced stress and pain indicators[8]. The Red Tractor requirement for a written pain relief policy is a good opportunity for farmers to review with their vet the appropriate use of NSAIDs for pain relief.[9]

What is your BVD control policy?

Fig 26. BVD control policy 2020

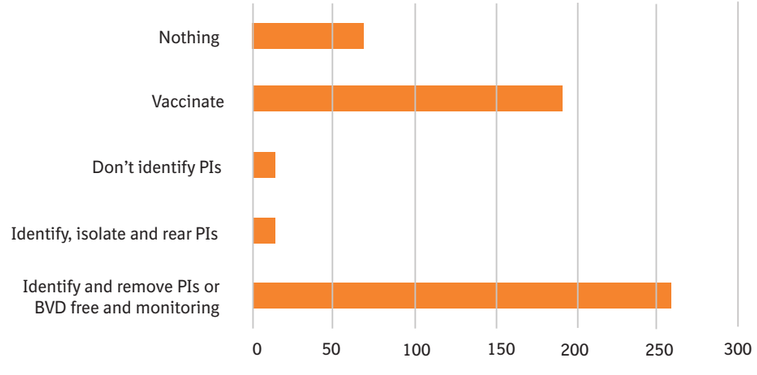


Fig 27. BVD control policy

It is interesting to note that most farms (58%) indicate that they are actively identifying and removing PIs or are part of BVD Free and monitoring, but this has decreased from the previous two years when a similar question was asked. In fact the percentage who state they are doing nothing has increased to 15% and the percentage vaccinating has decreased from 58% in 2018 to 43% in 2020. The figures are consistent with national figures[3] and from Boehringer's BVD National Survey, 2020 - 45%[10]. BVD is a difficult disease to eradicate and complacency may result in failure to eradicate or increase the tail of the eradication schemes.

What is your main source of information on calf health?

Fig 28. Main source of farmer information 2020

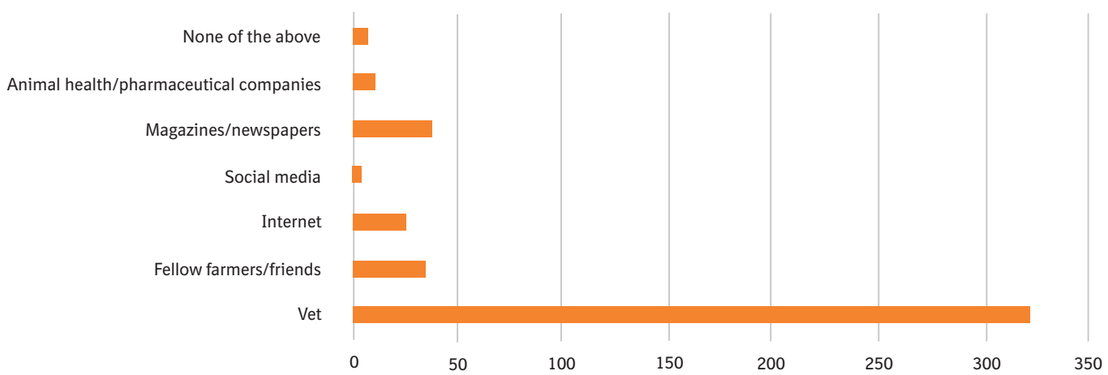
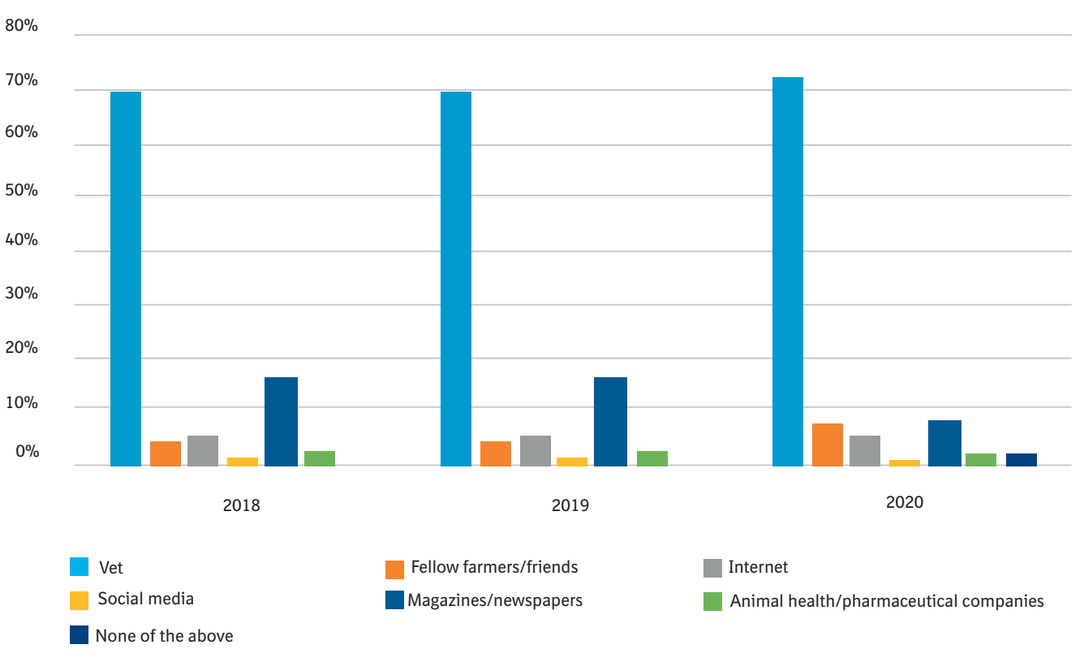


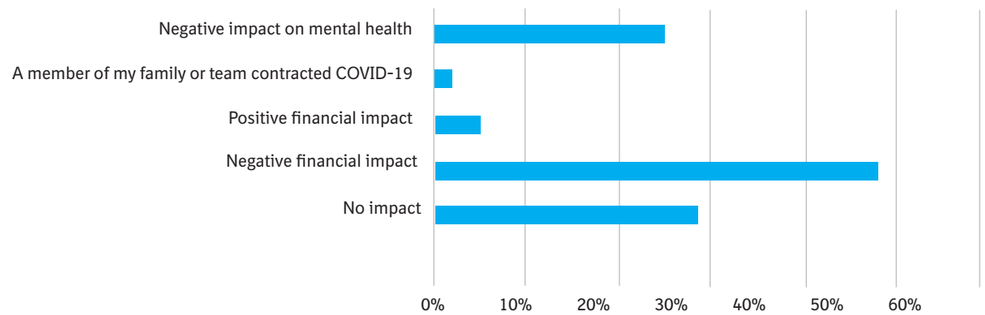
Fig 29. Main source of farmer information by year



The clear winner as an information provider was our respondents' vet, which is similar to the findings in previous years and indicates that the vet is a trusted adviser for most farms. Most proactive practices are working with their farms to prevent disease and the James Herriot days of primarily "fire brigade" emergency work, is not typical anymore. In recent years, calf health has taken a more prominent role with many vets involved in routine youngstock work, especially on dairy farms. Calf health is now stepping out of the of the shadows of the adult herd, becoming a more dominant interest, rather than playing second fiddle to the adult herd. Calves on many farms are the future of the herd and getting them off to a flying start is incredibly important, not only for their individual welfare, but also for the sustainability of the herd. The vet can have an excellent overview and insight to the issues and concerns of their clients' herds and is ideally positioned to provide the information and care needed.

How have you been affected by COVID 19?

Fig 30. The Impact of COVID on Farms

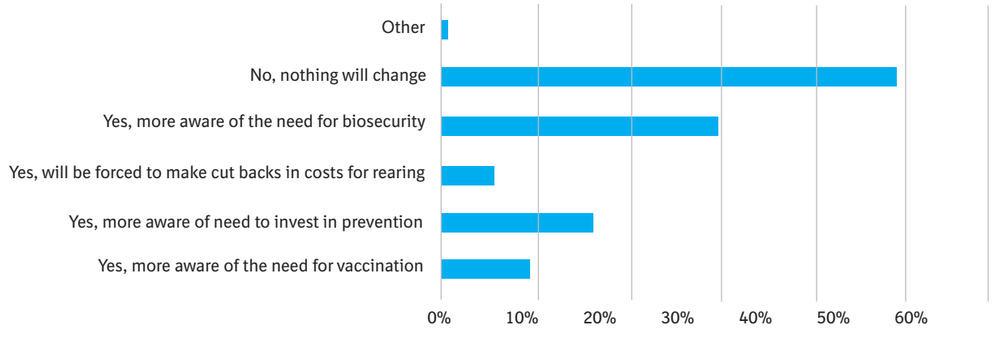


The survey was undertaken in June 2020 and at this time only 2% reported that a member of their family or farm team had had COVID. As time progresses, we could expect this figure to rise. Despite COVID infection for farms being apparently low, it has taken its toll, which is probably similar to other demographics.

Approximately two thirds of farmers, who responded, indicated that they had been impacted by COVID 19. Nearly half, 49%, reported a negative financial impact and 25% indicated that the pandemic has had a negative impact on their mental health.

Will you make any changes to farm policy post COVID?

Fig 31. Will you make any changes to farm policy post COVID?



Just over half of respondents stated that nothing would change following COVID, which means that nearly half, 49%, will make changes. The most common response was an increased awareness of biosecurity with nearly a fifth reporting the need to invest in prevention. Although farms noted a financial impact, only 6% suggested that they would be forced to make cut backs in calf rearing costs. Overall, this suggests that farms are acutely aware of the positive benefits of disease prevention and that investing in prevention is likely to be more cost effective.

Thanks to all the farmers who took part in this survey.

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