

# Q FEVER NEWS UPDATE

## Summer 2024



### Hello and welcome to our first Q fever newsletter



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As our Q fever journey is progressing, we thought it would be valuable to keep you updated. The campaign has progressed from our small base in 2022 when we started testing a few herds to now, where so many practices have come on board with putting Q fever on their potential differential diagnosis lists. At the end of April we had tested over 500 herds using the Q Test.

Recently, there have been 3 new publications of interest released that we have included in this edition. The first looks at the economical return on investment of vaccinating a Q fever infected farm. The next is a large study in Spain looking at the effect Q fever exposure has on reproductive parameters. The last study is a great evaluation of the literature surrounding the reproductive effects of Q fever. Details of the papers can be found further on.

We are now beginning to get feedback from farms that are a year into vaccination, with some of the data set to be shared in the next newsletter.

As always, if you have any queries or questions around Q fever, please speak to your Territory Manager or myself, Ceva's Ruminant Vet Advisor.

Katherine

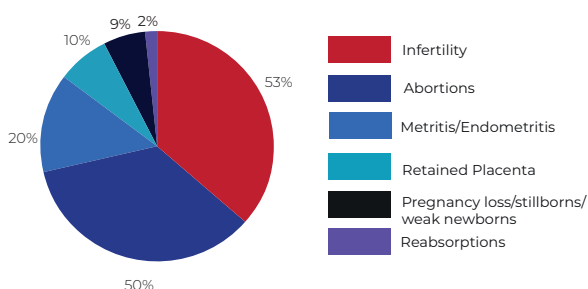
## Diagnosis Dashboard

### Q Test - BTM PCR

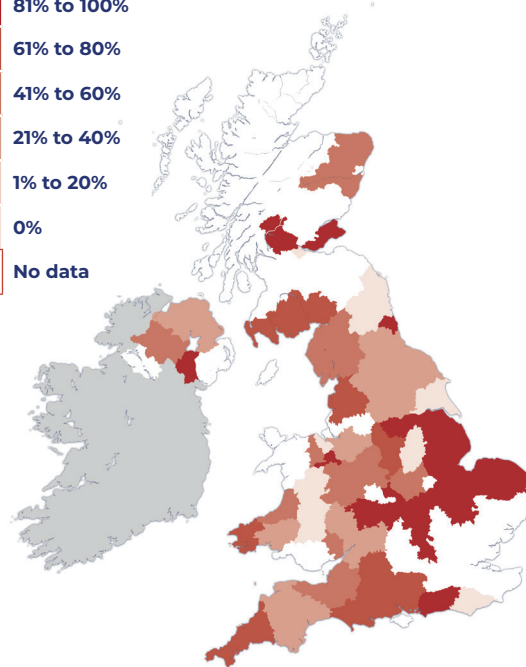
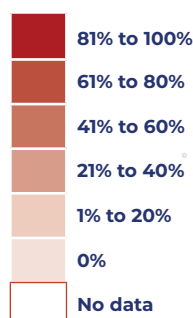
- ▶ **500** BTM samples tested since 2020
- ▶ **48%** of which received a positive diagnosis for Q fever
- ▶ **17%** of the positive cases (as diagnosed by the Q Test) have commenced vaccinating

Data collated upto and including 24 April 24<sup>1</sup>

Challenges reported in all positive herds, as tested by Q Test since 2020



\* Note on reabsorption data: in mid 2023 several new cases specifically reported 'reabsorptions' within the positive herds. Prior to this point no data was gathered routinely at sampling for the Q Test relating to reabsorptions, so it may be under represented here.



### Q Fever Map showing incidence of Q fever as diagnosed by Q Test (PCR)<sup>1</sup>

Total number of tests reported on map: 500.  
Number of tests by county varies from 45 to 1.  
National Average 48% positive.

## Research Papers of Interest

A New Tool to Assess the Economic Impact of Q Fever on Dairy Cattle Farms Raboisson, D et al. 2024

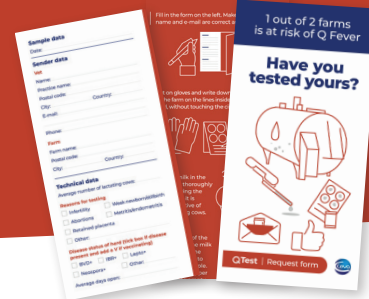
Prevalence, Risk Factors, and Relationship between Reproductive Performance and the Presence of Antibodies against Coxiellosis in Dairy Farm Milk Tanks in the Northwest of Spain Uxía Yáñez et al. 2024

Coxiella burnetii and Reproductive Disorders in Cattle: A Systematic Review Gisbert, C et al 2024





**Farmer info pack:**  
Please request copies  
from your Territory  
Manager for all herds  
that test positive for  
the disease



## Clinical Viewpoint



**Tom Angel BvetMed  
PGDipVCP MRCVS, veterinary  
surgeon at Synergy Farm  
Health, comments on his  
recent experience on Q  
fever diagnosis on farm  
and strategies for on-farm  
control:**

"The bulk milk Q fever testing we have been undertaking in our practice has returned positive results in approximately 65% of farms sampled.

The challenge for vets is assessing the impact this disease is having on farm. In some cases, where other causes have been excluded, signs such as increased pregnancy losses and still birth rates have been identified. However, on other units more subtle, but still costly effects, such as increased days open and increased transition disease may be attributable to Q fever.

Working out the best strategy for on-farm control is where supplementary diagnostics, such as serological testing of animals in different management groups, and the cost calculator from Ceva's Q'Audit has allowed us to guide the best vaccination protocols on different farms in a cost-effective manner.

Where a vaccination protocol has been implemented, early results have been positive with apparent reduction in pregnancy loss and still births on these farms. Whilst it is too early to assess any long-term impact of vaccination, these preliminary findings are encouraging."



Link to UK Government Q fever advice for farmers



Link to article about Q fever & milk consumption



Link to HSE website protective respiratory equipment



Link to Ceva Q fever website  
[www.qfever.co.uk](http://www.qfever.co.uk)

## Selection of Herds for Testing

The diagnosis of Q fever can be quite challenging, with poor seroconversion.

PCR BTM can be tested at anytime however a positive diagnosis is most likely when there is an introduction of freshly calved cows milk into the bulk tank, due to the intermittent nature of shedding of the bacterium.

**Think 'ASPW'** when selecting herds to test for Q fever. It is important to look for a number of fertility issues as a trigger to test, not just one or two.

<input checked="" type="checkbox"/> <b>Abortion</b>	<input checked="" type="checkbox"/> <b>Infertility</b>
<input checked="" type="checkbox"/> <b>Stillborn</b>	<input checked="" type="checkbox"/> <b>Weak or premature offspring</b>
<input checked="" type="checkbox"/> <b>Reabsorption</b>	<input checked="" type="checkbox"/> <b>Metritis &amp; endometritis</b>

As such problems are multi-causal, it is also recommended to only select herds that have good transition management and vaccination protocols in place when considering Q fever.

## The Q'Audit Tool

### - making herd selection for testing easier

Using UK referenced industry data on costings the Ceva Q'Audit has been developed to **highlight where fertility issues are placing a significant cost on a herd**. By inputting readily available herd data a cost associated to fertility is calculated. Please contact your territory manager for info.

## Q Fever Practice Dairy Audit

### Practice Name

Number of dairy clients in practice/branch

Total number of milking cattle under care

Average herd size

0	CLIENT	0
0	FARM NAME	0
0	HERD SIZE	440

### Practice & Herd Averages vs Industry

100 Day in Calf Rate (Median)

Calving to First Service (days)

Calving to Conception (CC) (days)

Pregnancy Rate %

Conception Rate %

Abortion Cases %

Industry Average	Industry Target	Herd Average
39	46	33
80	70	68
115	90	148
16%	21%	12%
38%	45%	24%
3.40%	0%	5.00%

### Practice & Herd Averages

Average Replacement % - FOR INFERTILITY

Average Days Open (days)

Average Abortion Cases %

Average Metritis Cases %

Average Endometritis Cases %

Average Retained Placenta Cases %

Average Weak Newborns/Stillbirths

Industry Average	Cost per case £		Ind Ave Cost to Farm	Cost to Farm
6.7%	£1,200	7.3%	£35,375	£38,544
115	£5.23	148	£0	£75,940
3.4%	£595	5.00%	£8,901	£18,090
5.5%	£297	5.00%	£7,318	£5,334
10.0%	£61	30.00%	£2,684	£8,052
3.7%	£505	6.80%	£8,221	£15,110
6.6%	£139	4.20%	£4,037	£2,589
Total Cost			£66,537	£159,838

Cost compared to industry average:

**£93,301**

References: 1 Q Test diagnostic results 2020 to 24 Apr 2024. Ceva Animal Health Ltd, UK, 2024

**COXEVAC**® suspension for injection for cattle and goats contains inactivated *Coxiella burnetii*, strain Nine Mile ≥72 QF Unit/ml. \*Q-fever Unit: relative potency of phase 1 antigen measured by ELISA in comparison with a reference item. **Legal Category:** UK [POM-V] IE [POM]  
Further information is available from the product SPC, data sheet or pack insert. Use medicines responsibly ([www.noah.co.uk/responsible](http://www.noah.co.uk/responsible))  
Prescription decisions are for the person issuing the prescription alone.

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