Bovine Tuberculosis, DEFRA Consultation 2021

BCVA Response: Part C

BRITISH CATTLE VETERINARY ASSOCIATION

Title: Bovine TB: consultation on proposals to help eradicate the disease in England

To: Defra

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The British Cattle Veterinary Association (BCVA) represents around 1,700 veterinary professionals principally involved with livestock. Most of our members are in farm and mixed practices throughout the UK. We also represent those studying and working in industry or academia.

Summary

BCVA welcomes the opportunity to contribute to the consultation on the government's strategy for working towards the eradication of bovine tuberculosis (bTB).

We are pleased to be able to broadly support some of the proposals, particularly where there is evidence these progress a purposeful approach toward bTB eradication, such as, the introduction of mandatory post-movement testing of cattle from higher risk regions, and for a revision of the current policy toward using the more sensitive IFN-γ test in the HRA and Edge Area.

Where there is no significant evidence to support a change to the current strategy, we have serious concerns about the impact of those proposals that could cause disruption to ongoing trials, regression in the progress that has been made, and further hardship on the farming industry, already crushed by the impact of this devastating disease.

This is particularly the case with the proposal to cease the issuing of new Badger Disease Control in 2022, and the proposal that new licences issued in 2021 and 2022, could be revoked after just two years of culling. In-order to achieve the government's aim to achieve Officially Bovine Tuberculosis Free (OTF) status for England by 2038, and based on the available evidence, BCVA maintains that, for now, culling must remain the principal means of controlling bTB infection from badgers in areas of high or rising infection. We look forward to reconsidering this position when we can review final outcomes from the badger vaccination trials.

Our Responses

Q 1a-1b: BCVA broadly supports the proposal to introduce mandatory post-movement testing (PoMT) of cattle moving from higher TB risk regions of Great Britain. The current lack of evidence to suggest wildlife reservoirs in the LRA and to some extent in the 12m Edge Areas, means additional measures and testing around movement could prevent wildlife infection and further subsequent infection of cattle.

Attention needs to be given to compliance and the risk of potential for confusion regarding the need for post-movement tests. This particularly relates to the LRAs buying-in cattle who will need to be able to identify if their purchases are in 6m Edge Area, and as such will require a post-movement test, as opposed to those buying in 12m Edge areas. Realistically this information needs to be available at the point of sale.

Farmer engagement, confidence and participation is crucial to the efficacy of any bTB strategy. It is therefore essential that future tactics embrace the opportunity to positively influence behavioral changes in terms of responsible purchasing. This means effective, consistent and ongoing communication between government, the veterinary profession and the farming industry.

As indicated in the consultation's appendix, in 2019 278 of 1844 (17%) of bTB herd incidents suggested cattle movements as the source of introduction for TB. In HRA this accounted for 10.9%, in Edge 20.6% - further supporting the requirement for a focus on cattle movement in future strategies for HRA.

Current data from PoMT shows that 0.042% of animals tested in the LRA are positive. This relates to 25 reactors from 58,000 tests preventing potentially 25 new herd breakdowns and subsequent spread into wildlife populations.

The rationale behind this change would appear to be to prevent infection entering an area with very low disease incidence. In order to maintain this, we would suggest that the most sensitive tests should be used for post-movement testing. Whilst repetition of the skin test may enhance sensitivity thought should be given to incorporating other tests such as Enferplex Bovine TB or antibody testing.

Q2a-2b: BCVA does not agree with these cost assumptions, particularly relating to handling facilities and testing capacity, and this does not fully acknowledge the impact on farmers, who take on a significant share of the on-farm costs and efforts required for bTB controls.

Whilst we support the batch approach, where it is possible, we would seek more detail around the issue of batch costs. For instance, 10 animals, with vet time at £150 per hour, a minimum 20 minutes to wash, test, and wash again – then repeating this on a second visit: this is 40 minutes minimum (increases if animals are not in the same batch or are in a different location), plus submission time and visit fees (£30-£50 a visit). Greater consideration needs to be given to the full exposure being placed on the farmer, which should include additional staff to coordinate the testing.

As tracer tests are currently covered by the APHA, where there is a requirement for a tracer test, will this negate the need for a post movement test? Or will the cost of a post movement test be covered?

BCVA would welcome and actively encourage an increase in Approved Finishing Units. These facilities are an isolated and biosecure unit, which provide a route for rearing, fattening or finishing cattle from TB-restricted and unrestricted farms. Changes to PoMT may affect the market for

animals from HRA or the Edge Area of England and an increased number of AFU would provide a safe outlet for these animals, without negatively impacting on cattle welfare and stocking densities.

Q3a-2b: BCVA welcomes a revision of current policy. Interferon Gamma testing alongside the skin test is being used to enhance the sensitivity of the testing regime. As the aim of this is to clear any residual infection, we would like to see the most sensitive tests applied, and we would ask for consideration of other tests in place of gamma testing such as the possible use of Enferplex, or antibody testing for these herds.

Additional testing alone is not going to clear bTB infection from these persistent herds. There is a clear need for greater understanding of the causes of persistent breakdowns so that we can tackle them at source, and for more evidence to support that residual infection exists in these herds. We would also call for increased laboratory funding and capacity to support the strategy.

Due to the lack of specificity of the interferon gamma test this may not be the most appropriate test for surveillance at herd level and would preferably be used at a targeted cohort level.

Q4a-24b: BCVA does not in any way support the proposed measure to cease the issuing of new Badger Disease Control in 2022. Based on the available evidence along with our experience on-farm, BCVA stands firm in its current position that culling must remain the principal means of controlling bTB infection from badgers in areas of high or rising infection, in-order to achieve the government's aim to achieve Officially Bovine Tuberculosis Free (OTF) status for England by 2038.

This position is not fixed, it is only based on current evidence. We would welcome further research into alternative methods of wildlife control, including vaccination. However, it is vital that we use the right tools, in the right areas, at the appropriate time, backed by all available evidence. We need a thorough transition plan; this 2022 deadline does not allow for that.

By 2022 the badger vaccination trials will not be complete, so vital evidence gathering would be disrupted. Indications suggest that badger vaccination is likely to be more effective once the badger population has been reduced (Martin et al, 2020). The Godfray review states that it is unrealistic to switch immediately to badger vaccination without an appropriate transition period.

We would call for the temporary suspension of this aspect of the plan (a minimum of two further years). This will allow initial vaccination trial data from East Sussex and Derbyshire to provide relevant evidence, to not only show if badger vaccination will be effective in decreasing the incidence of bTB in cattle, but also identifying how practical a large-scale vaccination programme like this could be.

There was a rigorous approach taken to gathering evidence to support culling through the Randomised Badger Culling Trial (RBCT) and the evidence gathering approach towards support for vaccination should be equally rigorous.

Q5a-5b: BCVA cannot support the proposal that new licences issued in 2021 and 2022, could be revoked after just two years of culling. The Randomised Badger Culling Trial (RBCT) evidence clearly demonstrated that proactive badger culling, coordinated over a large area, sustained for at least

four years, can lead to an overall reduction in TB in cattle in the culled area and land up to 2km away. In 55 culling operations where spoligotypes (genetic variants) were identified in both cattle and neighbouring culled badgers, 51 of these (94%) shared the same spoligotype. Within the consultation document it is noted that OTFW incidence dropped by an average of 27% over 2 years but this incidence decreased further to 51% after 4 years.

Evidence regarding perturbation is still not consistent. The RBCT suggested perturbation whilst the Downs report suggested in some areas there was no perturbation (variable from -46% to + 30% changes in incidence). Ham et al (2019) found that culling drove badgers to roam 61% further afield. This means that we cannot reliably suggest that perturbation will not appear after 2 years of culling which would undo all the benefits that the cull has already achieved.

Cull areas have lost 1-2 years due to the impact of the Coronavirus pandemic, in particular the newly licensed areas, where sign-up has been stymied. These areas will need the full four years indicated in their licenses. BCVA shares the long-term aim to move toward non-lethal management of wildlife but can only support an evidence-based move in that direction.

Q6a-6b: BCVA does not agree with the proposal to reduce the initial financial commitment required from the companies prior to application for a Badger Disease Control licence to the cost of three years of culling.

Farmer engagement, confidence and participation is crucial to the efficacy of any bTB strategy; the large initial outlay in equipment costs in that first year is more easily absorbed for the benefit of a four-year term. Reduction in time will reduce that perceived benefit and be a significant disincentive to sign-up.

Q7a-7b & 8: BCVA cannot support the proposal to restrict SBC licences to a maximum of two years, and to prohibit the issuing of SBC licences for previously licensed areas or areas licensed for Badger Disease Control after 2020.

Just as there was a significant collection of evidence gathered to support culling, including through the Randomised Badger Culling Trial (RBCT), which supported four-year periods, so should there be the same rigorous approach to any shift in strategy. Downs et al (2019) failed to show a change in disease incidence in Dorset in the cull area after two years of culling, although a decrease of 55% was seen in the 2km buffer. This may indicate that not all areas will see a benefit at two years and so we would call for further research into why some areas do see a benefit after two and others see at four years.

Licences need to be issued where there is evidence of wildlife infection, and at the end of four years there should be wildlife post-mortem testing to check for any continued evidence of disease. Where there is continued evidence, then SBC licences will still be required, and at the end of the CBC licence, further testing to establish the wildlife disease status. Establishing presence or absence of infection must be the driver if we are to achieve bTB free status.

Q9: The proposals considered in this consultation are in the main, reliant on there being an absence of spread of TB from cattle to wildlife. However, there is little indication of the strategies that will be

employed to achieve this. BCVA would call for the appropriate short and long-term funding to bring cattle vaccine to market as soon as possible, without detriment to other parts of policy such as the gamma budget. The use of the vaccine within the bTB strategy will only be successful if an appropriate plan for deployment and use is constructed using a solid evidence base and epidemiology and utilised alongside other current methods of control. It must be ensured that accessibility and availability do not become barriers to effective utilisation. BCVA look forward to the field trial results and planned licensing of the DIVA test over the next five years.

Conclusion

Strategies must be entirely focussed upon Bovine TB eradication for the sake of cattle health and welfare, for the benefit of the farming community, and to ensure a healthy wildlife population.

In establishing its long-term strategy in 2014, the government set out to achieve Officially Bovine Tuberculosis Free (OTF) status for England by 2038. This strategy complements Defra's own objective of supporting British farming and the government's objective of encouraging economic growth in this sector.

BCVA and its members continue to welcome the deployment of a combination of measures in both cattle and wildlife in order to achieve TB eradication. We also appreciate that this is an adaptive strategy and encourage reviews based on latest available evidence. We are seeing particularly encouraging progress in the High-Risk Area (HRA) and overall herd incidence and prevalence in England is showing a downward turn. For this reason, we cannot afford to now abandon proven tactics or disrupt ongoing programmes that are part of that success.

We would urge our colleagues in government to continue to make the very best use of our all our primary disease control tools. All decision making with regards to vaccination, cattle movement, wildlife control and diagnostic testing should be based on a thorough epidemiological assessment and with consideration of the practical deliverability of any changes.

Appendix A - References

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Appendix B – BCVA Member Feedback

On 5th March 2021, the British Cattle Veterinary Association sent five key questions, based directly on the DEFRA survey, to its members. We received 116 individual responses over four days.

- **91.3%** of respondents support the proposal to introduce mandatory post-movement testing of cattle moving from higher TB risk regions of Great Britain (the HRA, Edge Areas on six-monthly surveillance testing and Wales) into those parts of the Edge Area where herds are on annual surveillance testing.

Comments included:

"The specificity and false negative rate of any test also needs to be considered, for example if it is high value breeding animals moving and being tested."

"Post movement testing for animals leaving the high risk or edge areas and moving to lower risk areas is a sensible & necessary additional control measure."

"Clearly as a country we have already let TB spread from the SW to other regions. We must do all we can to prevent the disease becoming endemic elsewhere."

"I broadly support the proposals in line with BCVA's in-depth consideration of the proposal."

- When asked *Do you agree with the assumptions and the assessment of costs and benefits in the Regulatory Triage Assessment on introducing post-movement testing to parts of the Edge Area?* **46%** of respondents felt they didn't have enough information to respond, **43%** did not agree.

Comments included:

"On one hand I don't think it is fair that costs always land on farmers but on the other they do have a choice as to where they source animals from. It may reduce the market for animals from high-risk areas which will also detriment these farmers."

"Could become cost prohibitive to the farmer."

"This is (to me) a complicated economic assessment that would take me more time than I have to fully understand. I am therefore prepared to accept BCVA's reservations."

- **91%** of respondents agree that Defra should revise the current policy for using the more sensitive IFN-γ test in the HRA and Edge Area, so that in addition to persistent breakdowns, use of the test is mandatory where the below criterion is met.

Comments included:

"Considering the demonstrated efficacy of the Enferplex test, I strongly support revision of the current policy and believe more effective testing plays a critical role in the successful eradication of bTB"

"This should get on top of breakdowns quicker and contain them faster. There is a feeling in the farming community that breakdowns aren't dealt with quickly enough and it seems that once an area is infected it never goes away with the current system."

"The Irish are able to carry out gamma tests in the lab within 24hrs of the sample being collected, with a commensurate increase in sensitivity / specificity of the test. DEFRA seem reluctant / slow to deploy gamma because of costs and limited lab capacity."

- **86%** of respondents disagree with the proposal to cease the issuing of new Badger Disease Control (intensive cull) licences after 2022.

Comments included:

"We must not go against the scientific evidence that culling is one effective control measure and there is no conclusive proof that badger vaccination has any impact on disease control."

"Having recently completed my Tb revalidation I was surprised to see that the evidence of efficacy of the badger cull which was outlined in the teaching directly contradicted the recent announcement that culling was to be stopped."

"I feel there has been significant perturbation in areas with incomplete community participation, so the cull needs to extend to allow the perturbation to be managed."

- **83%** of respondents disagree with the proposal that new Badger Disease Control (intensive cull) licences issued in 2021 and 2022, could, after 2 years of culling, be revoked after a progress evaluation by the CVO?

Comments included:

"The evidence shows that you need a sustained Badger cull in order to have an impact of bTB levels in an area - we need to follow the available science."

"They are part of a long-term strategy which shouldn't be changed half-way through."

"Two years in not long enough to deal with perturbation. In my local area farmers are on their knees with increased local incidence due to perturbation. The cull must continue for a longer period."