

BVA Welsh Branch response to Welsh Government Consultation on a Refreshed TB Eradication Programme

Who we are

1. The British Veterinary Association (BVA) is the national representative body for the veterinary profession in the United Kingdom. With over 19,000 members, our primary aim is to represent, support and champion the interests of the United Kingdom's veterinary profession. We, therefore, take a keen interest in all issues affecting the profession, including animal health and welfare, public health, regulatory issues and employment matters.
2. BVA Welsh Branch represents members in Wales, bringing together representatives of specialist and territorial divisions, government, academic institutions and research organisations in Wales. The branch advises BVA on the consensus view of members in Wales on Welsh and UK issues.

TB Testing

Q1 Do you agree with the legal requirement for farmer paid PrMT from herds in the Low TB Area? Please explain your reasons

Yes

No

Comment:

3. BVA has supported the introduction of pre and post-movement bTB testing when this has been introduced in England, Wales and Scotland to reduce the risk of spread of bTB through movements of cattle.
4. We acknowledge that epidemiological analysis that has been undertaken which has shown local movements within the Low TB Area have contributed to the spread of disease, and re-introduction of PrMT would help curtail this spread. To aid transparency and to build support amongst farmers, who will be asked to pay for the PrMT. Welsh Government should publish this evidence base and make it accessible to farmers and vets.
5. Based on this evidence base, we support the proposal to extend mandatory pre-movement testing of cattle moving within the low TB area to protect farms within that region.
6. More generally, we ask government to provide a further analysis to show how effective pre and post-movement requirements have been to date at reducing new cases of bTB in lower prevalence regions. Providing and disseminating an evidence base for the extension of this policy would help maintain trust and goodwill amongst the farming and veterinary communities.

7. Government should also thoroughly evaluate the effect of the introduction of these testing requirements on behaviours. Adding barriers to the movement process may prompt more reflection on the part of farmers, leading to fewer risky movements.
8. We are mindful that this change will see divergence grow between Wales and England. This divergence has the potential to grow resentment amongst farmers who see their counterparts in England operating under a lower administrative burden. Providing the evidence base will be key to illustrating the need for this change and therefore building support.
9. Currently, the only type of test that can be used for post-movement testing is the single intradermal comparative cervical tuberculin test (SICCT). SICCT has limited sensitivity and is best utilised as a herd-level test. We believe that there may also be further scope in future to utilise the more sensitive interferon-gamma blood test (IFN γ) as part of this process.
10. Consequently, government should fund, and continue to roll out the IFN γ test as a more sensitive supplement to the SICCT and explore the potential for wider use of IFN γ as part of the testing regime, including pre- and post-movement testing and between short interval tests.
11. We believe this proposal would be enhanced by being accompanied by the provision of data which would further inform the purchaser of the risk posed by the movement.

Q2 Cattle entering the Low TB Area from higher incidence areas need a clear PrMT. Do you agree cattle moving into the Low TB Area from a higher incidence area should also require a PoMT on arrival? Please explain your reasons.

Yes

No

Comment:

12. BVA has supported the introduction of post-movement bTB testing when this has been introduced across the UK to reduce the risk of spread of bTB through movements of cattle. These procedures are primarily designed to protect the low incidence regions and nations of the UK from the introduction of infection.
13. We believe the extension of mandatory post-movement testing of cattle moving into the Low TB Area from a higher incidence area is a welcome ambition. How this proposal is introduced should be considered. Particularly, there needs to be an understanding of veterinary capacity to undertake this additional testing. We believe that pre-movement testing should be prioritised, and the delivery of those tests should not be jeopardised by expanding requirements. Post-movement testing requirements should be added when there is certainty that the capacity is available.
14. Again, we ask government to provide a further analysis to show how effective pre- and post-movement requirements have been to date at reducing new cases of bTB in lower prevalence regions. Providing and disseminating an evidence base for the extension of this policy would help maintain trust and goodwill amongst the farming and veterinary communities.
15. Currently, the only type of test that can be used for pre-movement testing is the single intradermal comparative cervical tuberculin test (SICCT). SICCT has limited sensitivity and is best utilised as a herd-level test. We believe that there may also be further

scope in future to utilise the more sensitive interferon-gamma blood test (IFN γ) as part of this process.

16. We believe this proposal would be enhanced by being accompanied by the provision of data which would further inform the purchaser of the risk posed by the movement.

Q3 Do you agree cattle moving into the Intermediate TB Areas from higher TB incidence areas should have a PoMT? Please explain your reasons.

Yes

No

Comment:

17. BVA has supported the introduction of post-movement bTB testing when this has been introduced across the UK to reduce the risk of spread of bTB through movements of cattle. These procedures are primarily designed to protect the low incidence regions and nations of the UK from the introduction of infection.
18. We support the proposal to extend mandatory post-movement testing of cattle moving into Intermediate TB Areas from higher TB incidence areas.

Q4 Do you agree with Welsh Government exploring the temporary introduction of PoMT of cattle originating from an identified TB Hotspot, or high risk herds? Please explain your reasons.

Yes

No

Comment:

19. BVA has supported the introduction of post-movement bTB testing when this has been introduced across the UK to reduce the risk of spread of bTB through movements of cattle. These procedures are primarily designed to protect the low incidence regions and nations of the UK from the introduction of infection.
20. We support the proposal to extend mandatory post-movement testing of cattle moving from an identified TB Hotspot, or high-risk herds. This is a sensible approach to managing risk and reflects the reality that there is considerable variation within defined areas as well as between them. There are areas in the High TB Area with a low incidence of the disease and hot spots within the Low TB Area.

Q5 If you answered yes to Q4, where do you feel this policy would have the most impact? (For example High TB Areas, Intermediate TB Areas or Low TB Area).

21. Previous policy interventions which have introduced pre and post movement testing were primarily designed to protect the low incidence regions of the UK. We would expect this policy to have the same benefit.

Q6 Do you agree with the proposal of not allowing a herd clearing test as a PrMT as we do in

persistent herd breakdowns? Please explain your reasons

Yes

No

Comment:

22. We believe there may be merit in slowing down the movements off farms that have regained OTF status. In Wales, cattle cannot be moved out of a herd that has recently regained OTF status after a chronic breakdown unless those animals undergo bespoke pre-movement testing at least 60 days after the clearing short-interval test. This reduces the risk of moving infected cattle to other herds following the lifting of restrictions.
23. Before expanding this requirement, government should provide an evaluation of the risk posed by animals moved off-farm shortly after receiving OTF status. To support this, the current Welsh Government policy should be evaluated, and those findings published to understand the outcome of that policy. We would ask that a full cost efficiency analysis be undertaken by government to explore these options to show the costs borne by farmers have been considered and the benefits to farmers will be worthwhile.
24. We would also suggest as part of that evaluation government consider the possibility of using a more nuanced risk-based approach. For example, it may be particularly beneficial to introduce this requirement for moves into the Low TB Area from recently cleared herds.
25. It is vital that all parties are proactive in making sure these herds that have been under restrictions are truly OTF with increased efforts put into biosecurity and additional testing to remove residual infection.

Q7 If you answered yes to Q6, where do you feel this policy would have the most impact? (For example High TB Areas, Intermediate TB Areas or Low TB Area, or in specific circumstances).

Q8 Do you agree with the statement *‘the test used as a PrMT should be more sensitive and therefore more likely to identify truly infected cattle but acknowledge this would be at the expense of identifying more false positive cattle’*? Please explain your reasons.

Yes

No

Comment:

26. The success of any system of bTB controls in cattle is underpinned by our ability to detect the presence of infection, primarily at herd level but also in individual live animals. It is vital to understand the specific context and establish clear goals before considering which test or tests should be applied. When interpreting tests for an individual animal (positive or negative predictive value) it is important to consider the likely prevalence of TB, as well as the sensitivity and specificity of the test. Different tests have different strengths and weaknesses that determine their suitability in different situations.
27. As is the case for any disease, tests for bTB would ideally provide both high sensitivity and high specificity. However, no currently available test can provide 100% sensitivity and specificity. This means there is a need to prioritise outcomes. If the priority is to detect as many bTB infected cattle as possible, a highly sensitive test is the appropriate tool. If the priority is to avoid removing uninfected cattle, then a highly specific test should be applied.
28. In the SICCT test, one can adjust the interpretation (cut-off) criterion that defines a positive result to manipulate the balance between sensitivity and specificity. Lowering the cut-off to increase test sensitivity tends to reduce its specificity, and vice versa. At standard interpretation, the skin test has a high specificity reported to be around 99.98%¹. Test sensitivity is more variable and is within the range of 50-80% at standard interpretation, depending on the stage/severity of infection and other factors.^{2,3}
29. Shifting the interpretation of SICCT to be more sensitive but less specific will find more infected animals as well as create more false positive results. However, at this point in the bTB disease control and eradication process, there is merit in seeking to prioritise sensitivity to unearth infection as part of statutory pre- and post-movement testing.
30. IFN γ has become a key part of the bTB programmes in all four administrations of the UK. We believe government should build on success to date and continue to fund and roll out the IFN γ test as a more sensitive supplement to the SICCT and explore the potential for wider use of IFN γ as part of the testing regime, including pre- and post-movement testing. There is also a benefit to using the OIE-validated antibody blood tests (IDEXX or Enferplex). Using a different test alongside SICCT may detect a different subset of the infected population, so the combined sensitivity of both tests is likely to be greater than either alone.
31. There is some benefit to exploring the more sensitive uses of the SICCT as well as combined testing approaches illustrated in these options. A full cost efficiency analysis should be undertaken by government to explore these options, as well as the option of retaining the current use of the SICCT. Such an analysis should include a disaggregation of public and private socioeconomic impacts.
32. In particular, we would ask government to state clearly, its understanding of the sensitivity and specificity of each option. Any such analysis should consider any potential impact on farmer perception and trust in the reliability of the test.

¹ Goodchild AV, Downs SH, Upton P, et al. Specificity of the comparative skin test for bovine tuberculosis in Great Britain. *The Veterinary Record*. 2015 Sep 12;177(10):258. [doi: 10.1136/vr.102961](https://doi.org/10.1136/vr.102961)

² Karolemeas K, de la Rua-Domenech R, Cooper R, et al. Estimation of the relative sensitivity of the comparative tuberculin skin test in tuberculous cattle herds subjected to depopulation. *PLoS one*. 2012 Aug 21;7(8):e43217. [doi: 10.1371/journal.pone.0043217](https://doi.org/10.1371/journal.pone.0043217)

³ Nunez-Garcia J, Downs SH, Parry JE, et al. Meta-analyses of the sensitivity and specificity of ante-mortem and post-mortem diagnostic tests for bovine tuberculosis in the UK and Ireland. *Preventive Veterinary Medicine*. 2018 May 1;153:94-107. [doi: 10.1016/j.prevetmed.2017.02.017](https://doi.org/10.1016/j.prevetmed.2017.02.017)

Q9 Do you acknowledge that if blood testing (gamma or IDEXX) testing is deployed as a PrMT, there may be an additional cost to testing, which could not be met by Government? Please explain your reasons.

Yes

No

Comment:

33. IFN γ has become a key part of the bTB programmes in all four administrations of the UK. We believe government should build on success to date and continue to fund and roll out the IFN γ test as a more sensitive supplement to the SICCT and explore the potential for wider use of IFN γ as part of the testing regime, including pre- and post-movement testing.

Q10 Do you agree with the legal requirement for farmers not to move cattle between test day 1 (day of injection known as TT1) and test day 2 (day of the reading of the test known as TT2) and between blood testing and receiving results. Please explain your reasons.

Yes

No

Comment:

34. We strongly agree with this change as a sensible measure.

Q11 Do you agree with the expansion of the current prohibitions in the TB (Wales) Order 2010 (as amended) to include requiring consent to collect a sample for TB testing and perform a TB test on a sample? Please explain your reasons.

Yes

No

Comment:

35. We believe this is a sensible measure.

Informed Purchasing

Q12 Do you agree with the proposals outlined for:

- Adding a new map to ibTB showing the number of years unrestricted cattle herds have been Officially TB Free (OTF).

Yes

No

Comment:

36. We support this measure. Its implementation must carefully consider what data are provided and seek to enable and widen access to, and use of, ibTB.
37. As Enticott et al.⁴ note, a common critique of government bTB policy has been the absence of information given to private vets and farmers about bTB incidents in their local area.^{5,6,7} We support greater provision of bTB data that is routinely collated, analysed and published showing local parameters. Therefore, we support efforts to amend ibTB to provide additional information. Government should develop ibTB to ensure it provides a participatory process that promotes ownership of data and the platform amongst farmers and private vets.
38. Private vets are key users of ibTB. Vets who were part of the usability trials for ibTB all “welcomed the development of ibTB. Private veterinarians, in particular, were pleased to be able to see these data, suggesting that the information was vital for them to work with their clients to help them manage bTB.”⁸ The provision of additional up-to-date and high-quality epidemiological data will be useful for this private veterinary audience.
39. Farmers are the other key audience for ibTB. However, to date, ibTB appears to have been of limited use to farmers at auctions unless the sale is catalogued to allow purchasers to research vendor bTB status in advance⁹ and the proportion of farmers using it for risk management is unknown.¹⁰ Providing additional information on ibTB, including the number of years that currently unrestricted cattle herds have been officially TB free, will be of use to those farmers who already make use of ibTB ahead of making a purchase and will facilitate risk-based trading in the UK. This change may also encourage some farmers to utilise this resource ahead of making purchases.
40. It is essential that farms are clearly identified within the proposed upgrade of ibTB in order to facilitate its use for risk-based trading. At present they are identified as dots on a map and there may be too much uncertainty where farms are close together.
41. BVA supports provision of data on number of years a herd is bTB free but any other data provided needs to be carefully considered. It will be essential to consider carefully what data should be provided and how that information should be presented to support the desired behavioural change. Outcomes of interventions are difficult to

⁴ Enticott G, Mitchell A, Wint W, Tait N. Mapping disease data: a usability test of an internet-based system of disease status disclosure. *Frontiers in veterinary science*. 2018 Jan 5;4:230. doi: [10.3389/fvets.2017.00230](https://doi.org/10.3389/fvets.2017.00230)

⁵ Defra, Bovine TB Risk Based Trading Group, [Bovine TB Risk-Based Trading: Empowering Farmers to Manage TB Trading Risks](#). 2013.

⁶ Defra, [Defra Bovine TB Citizen Dialogue. Cross-Cutting Summary](#). 2014.

⁷ Defra, [Draft Strategy for Achieving ‘Officially Bovine Tuberculosis-Free’ Status for England. Summary of Responses](#). 2014.

⁸ Enticott G, Mitchell A, Wint W, Tait N. Mapping disease data: a usability test of an internet-based system of disease status disclosure. *Frontiers in veterinary science*. 2018 Jan 5;4:230. doi: [10.3389/fvets.2017.00230](https://doi.org/10.3389/fvets.2017.00230)

⁹ Defra, [A strategy for achieving Bovine Tuberculosis Free Status for England: 2018 review](#). Para: 5.19. 2018 Feb.

¹⁰ Enticott G, National Assembly for Wales, [Research Briefing Bovine TB in Wales: governance and risk](#). 2018 Jan.

predict, and responses vary by target groups.¹¹ Behavioural economics can be complex, but at a basic level, the EAST (Easy, Attractive, Social and Timely) framework, developed by the Behavioural Insights Team,¹² can be useful.

- **Mandate provision and display of TB information at point of sale**

Yes

No

Comment:

42. BVA supports this proposal for mandatory sharing of bTB information at point of sale. However, data must be up to date and timely and presentation of data needs careful consideration.
43. Knowledge-based, risk-based trading should be accepted as standard practice, with provision made for this to become mandatory. To facilitate this, the provision of information must be user-friendly and provided in a timely manner. The expansion of the Livestock Information Programme (LIP) should incorporate animal health data at the point of sale.
44. We support the focus on point-of-sale information sharing within this option. The Behavioural Insights Team¹³ emphasises that interventions to change behaviour should be timely, i.e., prompt people when they are most likely to be receptive. When discussing animal movements, that moment is likely to be the point of sale.
45. As noted above, it will be essential to first carefully consider what behaviour change is desired and fully explore all aspects of motivation, capacity and opportunity. Following this assessment government should consider how that information should be presented to deliver the desired behavioural change. More information may not be better, and the information that is shared should be that which is most closely aligned with evidence-based trading.
46. It would be worthwhile for Government to engage farmers and private vets to evaluate the usefulness of any information presented. There is scope for the development of a system of risk-scoring for this purpose. The presentation of risk scores should be simple and clear for farmers and their private vet. It would be beneficial to ensure any risk scoring aligned with other schemes that are already in use, such as that utilised by CHeCS.

Q13 In the future, do you believe there should be implications for cattle keepers who fail to take notice of TB information, and make a purchase regardless of highlighted risks? Please explain your reasons. What do you believe these implications should be?

Yes

¹¹ Scottish Government, Agriculture and Climate Change: Evidence on Influencing Farmer Behaviours. 2012 Oct 29.

¹² <https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/>

¹³ The Behavioural Insights Team, EAST Four simple ways to apply behavioural insights. 2014.

No

Comment:

47. We support an approach that rewards responsible behaviours. We would ask that as this measure is progressed it is framed as a reward for responsible movements and not as a penalty for risky movements. We support expanding 'earned recognition' policies through compensation and testing policy.
48. There is evidence from human healthcare that positive messaging (or 'gain messaging') influences people's behaviour more significantly than negative scenarios ('loss messaging').¹⁴ One study argued that gain messages on NHS letters (e.g. if you adopt this behaviour your life will benefit in these ways), rather than loss messages (e.g. if you don't do this, you will suffer from x), were more effective in stimulating uptake of advice on diabetes.¹⁵ The literature, therefore, suggests that there is some benefit in adopting an approach that uses positive language/scenarios to encourage behaviour changes.
49. Positive reinforcement of behaviours can also be achieved by associating them with positive recognition in the market. Several papers^{16,17,18} have found that compliance was a key determinant of behaviour and financial rewards for behavioural change were also seen as vital. Jones et al.¹⁹ found that dairy farmers in Spain, Sweden, France, and Germany were more likely to prioritise herd health if there was a perceived reward.
50. One means of providing positive reinforcement to farmers for demonstrating appropriate behaviour is via the compensation regime. Currently, when an animal tests positive for bTB as part of the testing regime, it will be removed and culled. The Government pays statutory compensation when it has deprived someone of their property to help eradicate a disease.²⁰ The use of compensation has behavioural effects; it encourages participation with the government programme and removes a disincentive to report disease where it is suspected. Any change in policy should be mindful not to remove this positive behavioural effect within the current policy.
51. There are already examples where compensation is withheld for those who undertake risky behaviour as well as to reward positive behaviours. The Welsh Government currently applies reductions to TB Payments for keepers who breach the TB Order. In

¹⁴ Rose DC, Keating C, Morris C. [Understanding how to influence farmers' decision-making behaviour: a social science literature review, report for the Agriculture and Horticulture Development Board](#). 2018.

¹⁵ Kullgren JT, Hafez D, Fedewa A, Heisler M. A scoping review of behavioral economic interventions for prevention and treatment of type 2 diabetes mellitus. *Current diabetes reports*. 2017 Sep 1;17(9):73. [doi: 10.1007/s11892-017-0894-z](#)

¹⁶ Cary J, Roberts A. The limitations of environmental management systems in Australian agriculture. *Journal of Environmental Management*. 2011 Mar 1;92(3):878-85. [doi: 10.1016/j.jenvman.2010.10.055](#)

¹⁷ Gourdet CK, Chriqui JF, Piekarz E, et al. Carrots and sticks: compliance provisions in state competitive food laws—examples for state and local implementation of the updated USDA standards. *Journal of school health*. 2014 Jul;84(7):466-71. [doi: 10.1111/josh.12168](#)

¹⁸ Prager K, Curfs M. Using mental models to understand soil management. *Soil Use and Management*. 2016 Mar;32(1):36-44. [doi: 10.1111/sum.12244](#)

¹⁹ Jones PJ, Sok J, Tranter RB, et al. Assessing, and understanding, European organic dairy farmers' intentions to improve herd health. *Preventive Veterinary Medicine*. 2016 Oct 1;133:84-96. [doi: 10.1016/j.prevetmed.2016.08.005](#)

²⁰ Hansard. House of Commons, [Vol 670, Col 340WH](#). 2020 Jan 29.

England, the compensation regime has been used to encourage membership of the bTB health scheme accredited under the Cattle Health Certification Standards (CHeCS). A 50% reduction in compensation payment on animals purchased after the onset of a TB breakdown does not apply where the herd is accredited under the scheme, provided that accreditation was gained prior to the herd losing its OTF status.

52. Government should engage behavioural scientists to carefully consider how this approach could be expanded and integrated into a broader system of “earned recognition.” This would allow more positive messaging to be deployed: rewarding farmers for best practice instead of just applying penalties. Recognition should be based on the past performance, biosecurity measures and local risk faced by each farm. This should be a wider consideration than simply considering movements as described in the call for views document.
53. A holistic approach to earned recognition that incorporates compensation alongside increased bTB testing intervals should be considered.
54. Rewarding responsible cattle movements through the testing policy may fit well with a behavioural science approach because reducing the perceived burden of testing would be welcomed by farmers and would closely link the risk of their cattle with the degree of surveillance.
55. Reducing frequency of testing will act as an incentive for farmers by reducing the logistical burden, uncertainty and stress that comes with testing. However, it may be more difficult to create a positive messaging for rewarding responsible cattle movements through testing costs. This is because currently the cost of this additional testing is covered by the taxpayer. Breakdown testing is also covered by the taxpayer. Farmers being required to earn recognition in order to retain the status quo approach may not be seen as clearly as rewarding responsible movements but more likely seen as penalising risky movements. Government would need to consider how to communicate this change alongside other changes to ensure the overall message of rewarding responsible behaviour is heard.

Payment for TB affected cattle

Q14 The Welsh Government proposes to link TB payments to implementation of disease prevention and control practices. What are your views on this?

56. We support an approach that rewards responsible behaviours such as the implementation of disease prevention and control practices beyond responsible movements. We would ask that as this measure is progressed, it is framed as a reward for responsible movements and not as a penalty for failing to apply appropriate practices. We support expanding ‘earned recognition’ policies through compensation and testing policy.
57. This approach could require considerable resourcing to monitor the implementation of disease prevention and control measures should engage the veterinary profession to develop a model that is cognisant of the impact on the veterinary workforce and reduces the need for duplication on the part of the farmer.
58. Government may propose a role for the veterinary profession to sign off on the implementation of appropriate measures. Private vets are trusted advisors to farmers and uniquely positioned to offer advice. Government should ensure that the monitoring of this proposal should in no way undermine that trusted relationship. Government should not place veterinary surgeons in a position where they can be seen as having a conflict between acting as trusted advisors and arbitrators of whether compensation will be paid in full. This can cause them significant moral and professional conflict

because veterinary surgeons have both a high degree of professionalism and a close working relationship with farmers. Moral conflict has been shown to have a significant detrimental effect on the well-being of veterinary surgeons.

59. There is evidence from human healthcare that positive messaging (or 'gain messaging') influences people's behaviour more significantly than negative scenarios ('loss messaging'). One study argued that gain messages on NHS letters (e.g. if you adopt this behaviour your life will benefit in these ways), rather than loss messages (e.g. if you don't do this, you will suffer from x), were more effective in stimulating uptake of advice on diabetes. The literature, therefore, suggests that there is some benefit in adopting an approach that uses positive language/scenarios to encourage behaviour changes.
60. Positive reinforcement of behaviours can also be achieved by associating them with positive recognition in the market. Several papers^{21,22,23} have found that compliance was a key determinant of behaviour and financial rewards for behavioural change were also seen as vital. Jones et al. found that dairy farmers in Spain, Sweden, France, and Germany were more likely to prioritise herd health if there was a perceived reward.
61. One means of providing positive reinforcement to farmers for demonstrating appropriate behaviour is via the compensation regime. Currently, when an animal tests positive for bTB as part of the testing regime, it will be removed and culled. The Government pays statutory compensation when it has deprived someone of their property to help eradicate a disease. The use of compensation has behavioural effects; it encourages participation with the government programme and removes a disincentive to report disease where it is suspected. Any change in policy should be mindful not to remove this positive behavioural effect within the current policy.
62. There are already examples where compensation is withheld for those who undertake risky behaviour as well as to reward positive behaviours. The Welsh Government currently applies reductions to TB Payments for keepers who breach the TB Order. In England, the compensation regime has been used to encourage membership of the bTB health scheme accredited under the Cattle Health Certification Standards (CHeCS). A 50% reduction in compensation payment on animals purchased after the onset of a TB breakdown does not apply where the herd is accredited under the scheme, provided that accreditation was gained prior to the herd losing its OTF status.
63. Government should engage behavioural scientists to carefully consider how this approach could be expanded and integrated into a broader system of "earned recognition." This would allow more positive messaging to be deployed: rewarding farmers for best practice instead of just applying penalties. Recognition should be based on the past performance, biosecurity measures and local risk faced by each farm. This should be a wider consideration than simply considering movements as described in the call for views document.
64. A holistic approach to earned recognition that incorporates compensation alongside increased bTB testing intervals should be considered.

²¹ Cary J, Roberts A. The limitations of environmental management systems in Australian agriculture. *Journal of Environmental Management*. 2011 Mar 1;92(3):878-85. [doi: 10.1016/j.jenvman.2010.10.055](https://doi.org/10.1016/j.jenvman.2010.10.055)

²² Gourdet CK, Chriqui JF, Piekarz E, et al. Carrots and sticks: compliance provisions in state competitive food laws—examples for state and local implementation of the updated USDA standards. *Journal of school health*. 2014 Jul;84(7):466-71. [doi: 10.1111/josh.12168](https://doi.org/10.1111/josh.12168)

²³ Prager K, Curfs M. Using mental models to understand soil management. *Soil Use and Management*. 2016 Mar;32(1):36-44. [doi: 10.1111/sum.12244](https://doi.org/10.1111/sum.12244)

65. We would ask that the veterinary profession is engaged in the development of the method to assess implementation of disease prevention and control practices.

Q15 Do you agree/ disagree with any of the 3 proposals outlined in section 7? Please explain your reasons.

Yes

No

Comment:

66. As noted above, we support an approach that rewards responsible behaviours through a system of ‘earned recognition’ that considers all aspects of the control programme including compensation. Therefore, we would support an exploration of the aspect of the second proposal outlined in section 7 where there would be an increase to payment based on membership of an approved animal health accreditation scheme.
67. We would welcome a shift within the TB control programme which would empower farmers and private vets to feel more ownership of disease control. Therefore, the development of an independent body which would set compensation, paid in part by an industry levy, is an interesting proposal.
68. However, centring a discussion on increased industry ownership of the disease within a proposal with the declared aim of reducing government compensation fails to capture the wider objectives that could be achieved by such a move. This is also unlikely to engender buy-in from industry. Therefore, we would ask for government to further explore this proposal, in partnership with the farming industry.

Q16 Annex 1 to this consultation sets out all proposals considered by the TB Eradication Programme Board. Are there any other proposals you feel should be explored? If so, please provide details.

Yes

No

Comment:

69. Adequate and efficient data sharing between government vets and private vets has been identified as a key enabler to building relationships and delivering improved outcomes. On the other hand, a failure to share data can cause a disconnect between government and private vets and is likely to result in contradictory advice being given to farmers. As Enticott notes, limits on the sharing of government data with private vets can be interpreted by private vets as “a perceived lack of trust in private veterinarians’ epidemiological skills by Government”.²⁴
70. There are legal and regulatory reasons why data sharing is not always possible, but it can easily be misinterpreted as a lack of trust. However, introducing systems to allow

²⁴ Enticott G, Mitchell A, Wint W, Tait N. Mapping disease data: a usability test of an internet-based system of disease status disclosure. *Frontiers in veterinary science*. 2018 Jan 5;4:230. doi: 10.3389/fvets.2017.00230

data sharing between government vets and private vets should be prioritised. As a first step, results from routine testing, including a positive result, should be shared with a farmer's private vet to allow a swift, coordinated response between all parties.

Explore prohibiting feeding of unpasteurised milk to livestock on OTFW premises

Q17 Do you agree with the proposal of prohibiting feeding of unpasteurised milk to livestock on OTFW premises? Please explain your reasons.

Yes

No

Comment:

71. We agree that OTFW herds should not be feeding unpasteurised milk to livestock. In our understanding, this is not common practice in Wales. However, where this does happen it is appropriate that APHA vets have a mechanism to stop the practice before any consequences emerge.
72. To support this, the current Welsh Government policy should provide a clear evidence base to show the need for an intervention. We would ask that a full cost efficiency analysis be undertaken by government to show the costs borne by farmers have been considered and the benefits to farmers will be worthwhile.
73. When communicating this change, it is important that there is no opportunity for misinformation that could negatively impact animal health. For example, that this could be seen as a ban on colostrum.

TB and non-bovine species

Q18 Do you agree with the Welsh Government exploring the consolidation of the legislative requirements for sheep and pigs into the Tuberculosis (Wales) Order 2011? Please explain your reasons.

Yes

No

Comment:

74. The pathology, clinical presentation, and epidemiology of bTB infections and disease can vary considerably across non-bovine farmed species. Given the right conditions, they can also infect other animals and herds of the same species (e.g. via movements of undetected infected animals between holdings). However, with no statutory surveillance programme for non-bovine farmed species, there is some uncertainty around the true prevalence of infection.
75. There are also wider social and economic factors between and within different sectors and it is important to be mindful of the differing relationships that keepers will have to their animals.

Within each species there will be a wide range from large scale farmers to those who have a relationship that is more akin to that of a pet owner.

- 76.** We welcome this proposal by Government, as it provides an opportunity to enact clear and consistent protocols for legislative requirements in non-bovine farmed species. Across non-bovine farmed animals, there are issues that are common across all species. Government and industry communications on the issue of bTB are largely designed with cattle farmers as the intended audience, which is understandable given the relative significance of bTB within the cattle sector. However, as a result, farmers of non-bovine species can be less aware of the risk of bTB to their animals. Government, industry, and the veterinary profession should tailor messages to the farmers of non-bovine farmed species.
- 77.** Although bTB in such animals is an important problem, there is far less well-validated data for the diagnosis of the disease in live animals other than cattle. Testing of non-bovines must fully consider the availability and reliability of the test in non-bovine species as well as how this will be communicated to farmers.

Q19 Do you agree with the approach of identification of non-bovines for TB testing purposes set out in section 9B? Please explain your reasons.

Yes

No

Comment:

- 78.** This is a sensible measure.

Governance

Q20 Do you agree with the role and representation of the TB Eradication Programme Board? Please explain your reasons.

Yes

No

Comment:

- 79.** We fully support a partnership approach involving farmers, vets, government officers and other appropriate stakeholders (food processors, conservationists, scientists) as a strategy to develop constructive engagement and ensure that bTB eradication strategy is unified and appropriate to the local area.
- 80.** We welcome the structures that have been proposed to manage and oversee partnership working. Veterinary expertise and input at every level is a necessity, and therefore, we strongly support this inclusion. Veterinary Officers and private veterinary practitioners bring clinical expertise as well as a wealth of local knowledge to the process of eradicating bovine Tuberculosis, working in partnership with farmers to provide biosecurity advice, surveillance expertise and farm health planning.

81. We support appropriate payment for board members. To do otherwise may limit those who are able to take part.

Q21 Do you agree with any of the options outlined with regards to stakeholder involvement in the TB Eradication Programme set out in section 10B? If yes, please state which. If not, please provide the reasons why.

Yes

No

Comment:

82. Wales has different risk areas and therefore different priorities and risks in each area would be sensible. However, no governance structure will perfectly map the changing geographical nature of bTB in Wales. There may be some benefit to reducing the number of boards to two instead of three as part of the governance review. This fits with the two regional offices in Carmarthen and Caernarfon in south and north Wales respectively, and the two Veterinary Delivery Partners (VDP's).
83. It is more important that whatever structure is agreed can set a clear direction for the eradication of this disease. The roles and responsibilities of the governance bodies should be reviewed to embed clear governance and good communication and stakeholder engagement.

Q22 Do you believe there is an alternative approach? If so, please explain further.

Yes

No

Comment:

N/A

Q23 Do you agree with the proposal of establishing a Technical Advisory Group? If so, please suggest scientific disciplines which could add value to the Programme? Please explain your reasons.

Yes

No

Comment:

84. Measures taken to achieve eradication must be based on the application of both sound scientific research and veterinary epidemiology. If a technical advisory group is

instituted, it will be vital that membership of such a body should include appropriate veterinary expertise.

85. Epidemiological expertise will be essential. The importance of epidemiology is impossible to overstate. As a discipline, it is central to the understanding of bTB transmission and how it is influenced by different interventions and controls. The evidence provided by epidemiological research underpins the design and delivery of bTB policy.
86. Social science expertise, including animal health economics, should also be reflected in such a group. Research in the social sciences provides insight into farmers' decision-making regarding cattle purchasing, the application of biosecurity measures on farm and how decisions that promote disease control can be incentivised.

Other questions

Question 24: We would like to know your views on the effects these proposals would have on the Welsh language, specifically on opportunities for people to use Welsh and on treating the Welsh language no less favourably than English. What effects do you think there would be? How could positive effects be increased, or negative effects be mitigated?

87. Any actions to improve the control and eradication of bTB will support rural communities in Wales through improved viability of cattle keeping. As rural communities have a higher percentage of Welsh speakers, the state of disease control and its impact on farms and the families living there will impact on the use of the Welsh language.
88. The proposals to increase the testing requirements around cattle movements will impact significantly on veterinary resources in Wales. Not all vets in Wales in rural areas are Welsh speakers. If greater resource is needed, lay testing should be actively promoted especially within a pool of technically trained veterinary assistants.