



Department
for Environment
Food & Rural Affairs

www.gov.uk/defra

Improving TB cattle controls, including a proposal for statutory post-movement testing

**A consultation exercise contributing to the delivery of
the Government's Strategy for achieving Officially
Bovine Tuberculosis Free (OTF) status for England**

28 August 2015

Contents

Part A: Background.....	1
1. Purpose of the consultation	1
2. How this consultation links to the wider strategy for achieving Officially Bovine Tuberculosis Free (OTF) status for England	2
Part B: Proposal for statutory change	2
3. Compulsory post-movement TB testing of cattle entering (directly or via a market) the LRA of England from herds in Great Britain on annual (or more frequent) surveillance testing, including those in the LRA	2
4. Post-movement test type	3
5. Proposed post-movement testing exemptions	4
Part C: Additional proposed measures	5
6. A more robust approach to dealing with TB breakdowns in the High Risk Area (HRA)	5
7. Allowing cattle to move to/from rented grazing within a 10 mile radius of the herd owner's home premises without pre-movement testing.....	7
8. Phasing out Exempt Finishing Units in the Low Risk Area	7
9. Reducing TB risks from Approved Finishing Units.....	8
10. Reducing TB risks from the sale of cattle originating from 4-yearly testing herds...	8
11. Enhanced TB surveillance in the Edge Area	9
12. Situations in which private interferon-gamma (IFN- γ) blood testing could be permitted.	10
Part D: Update on other policy developments.....	12
13. Piloting the use of TB risk rating scores for cattle herds, to support Risk-Based Trading	12
14. Sharing TB breakdown information.....	12
15. Regular publication of TB epidemiological reports for the LRA and Edge Area	13
Part E: Tell us what you think	13

Part A: Background

1. Purpose of the consultation

1.1 Bovine TB is the most pressing and costly animal health problem in the UK. The disease threatens our cattle industry and presents a risk to other livestock, as well as wildlife species (mainly badgers), pets and humans. The Government remains determined to tackle bovine TB by all available means, including through enhanced cattle controls.

1.2 Defra is inviting views from stakeholders on a proposal for statutory TB post-movement testing of cattle moved (directly or via a market) from herds in England on annual (or more frequent) surveillance testing, and from designated counties in Wales, to all herds in the Low Risk Area (LRA) of England. This new policy would not apply to cattle slaughtered within 120 days of arrival at the destination herd in the LRA. We are also planning a small number of other post-movement testing exemptions (see paragraph 5 below).

1.3 Also included within this consultation:

- A proposal for a more robust approach for dealing with TB breakdowns in the High Risk Area (HRA).
- A proposal to allow cattle to move to/from rented grazing within a 10 mile radius of the herd owner's home premises without pre-movement testing.
- A proposal to phase out Exempt Finishing Units in the LRA.
- A proposal to reduce TB risks from Approved Finishing Units.
- A call for views on options for reducing TB risks from sales of cattle from four-yearly tested herds.
- A call for views on the case for enhanced TB surveillance in additional counties in the Edge Area.
- A call for views on the situations in which private interferon-gamma (IFN- γ) blood testing could be permitted.
- Updates on some other policy developments.

1.4 Details of how to respond are set out in Part E of this document.

2. How this consultation links to the wider strategy for achieving Officially Bovine Tuberculosis Free (OTF) status for England

2.1 The Government's Strategy for achieving Officially Bovine Tuberculosis Free (OTF) status for England was published in April 2014 and can be found at <https://www.gov.uk/government/publications/a-strategy-for-achieving-officially-bovine-tuberculosis-free-status-for-england>.

2.2 In proposing changes to TB cattle controls our aim is to strike a balance between robust disease control - aimed ultimately at achieving OTF status for England - and supporting a sustainable livestock industry.

2.3 The proposals and initiatives set out in this document build on measures introduced by the previous Coalition Government, which included:

- The tightening of pre-movement testing rules by removing exemptions for movements to and from common land and for movements within a Sole Occupancy Authority – June and October 2014 respectively.
- Ending of partial de-restriction of TB breakdown herds and tightening of the rules for TB Isolation Units – October 2014.
- Strengthening Common Agricultural Policy (CAP) scheme penalties for overdue TB tests – introduced January 2014 and extended in January 2015.
- Replacement of annual surveillance tests and radial testing around herd breakdowns with six-monthly surveillance testing of all herds in the Cheshire Edge Area – January 2015.

Part B: Proposal for statutory change

3. Compulsory post-movement TB testing of cattle entering (directly or via a market) the LRA of England from herds in Great Britain on annual (or more frequent) surveillance testing, including those in the LRA

3.1 Compulsory post-movement skin tests are already required for cattle moving to Scotland from annual testing areas in England or Wales, no fewer than 60 days and no more than 120 days after their arrival in Scotland. If the post-movement test has not been carried out by 120 days after an animal's arrival in Scotland, or the animal has not been slaughtered, the test is regarded as overdue and movement restrictions are imposed on the receiving herd until the test has been carried out.

3.2 In a consultation held from 11 June to 11 July 2014, we invited views on introducing compulsory post-movement testing, along the same lines as in Scotland, for cattle moved from herds on annual testing in England and Wales to herds in the LRA of England, where the background TB surveillance testing frequency is four years. We also suggested that cattle intended for slaughter within 120 days of their arrival in the LRA should not be affected – see proposed exemptions in section 5 below.

3.3 This idea was well supported by most respondents to the consultation, with 63% agreeing with the proposal to follow Scotland's example. Defra's Chief Veterinary Officer, APHA veterinary advisers, the TB Eradication Advisory Group for England (TBEAG), the British Veterinary Association and the British Cattle Veterinary Association all supported post-movement testing as a proportionate way of improving the early detection of infected cattle moved to the LRA from higher TB risk herds. A summary of responses to that consultation can be found at <https://www.gov.uk/government/consultations/bovine-tb-cattle-control-measures-tackling-cattle-to-cattle-transmission>.

3.4 The incidence of TB in the LRA is very low and stable. The majority of cases disclosed are associated with movements of cattle (with undisclosed infection) from the annual TB surveillance testing areas. Although testing of cattle before they move between two premises represents a cost-effective control measure, it is not possible to detect every infected animal with the current ante-mortem TB testing technology for cattle. Furthermore, cattle may be infected after a negative pre-movement test, either in the period between testing and departure or during transit to the farm of final destination.

3.5 Post-movement testing would enhance the sensitivity of the TB surveillance regime, by detecting additional infected cattle missed during pre-movement testing and before they cause further disease spread within the herd of destination and to other herds in the LRA. It would also strengthen our case for securing OTF status for the LRA of England between 2018 and 2025, which we believe would bring economic and reputational benefits for the English cattle industry and government.

3.6 Consequently, our proposal is to amend The Tuberculosis (England) Order 2014 to require post-movement testing of cattle entering (directly or via a market) the LRA of England from herds in England on annual (or more frequent) surveillance testing and from herds in designated counties in Wales. Herd owners would be responsible for arranging and paying for post-movement tests (skin tests), which would be required within 120 days of an animal joining an LRA herd. At least 60 days must have passed since the animal's most recent skin test. Cattle that require a post-movement test cannot be moved on from the destination premises in the LRA until the test has been completed with negative results.

4. Post-movement test type

4.1 One of the choices that will need to be considered is whether we should only use the tuberculin skin test or whether this should be supplemented with the more sensitive

(but less specific – i.e. a slightly increased probability of false positive results) interferon gamma (IFN- γ) blood test. There are pros and cons with each option, including their relative costs and practicalities. Each detects slightly different sub-populations of infected animals and there are options on how they might be used most effectively.

4.2 Currently the tuberculin skin test is the only official EU standalone test for bovine TB in live cattle and **initially, at least, we propose that the comparative skin test only is used for post-movement testing**. If performed correctly it remains the most practical and cost-effective tool for detecting the disease and it remains the test of choice for routine surveillance purposes. At standard interpretation, about 1 in 5,000 TB-free cattle give a false positive result to this test. But it can miss a sizeable proportion of infected cattle. Both the severe interpretation of the comparative tuberculin skin test used in infected herds under TB restrictions and the ‘bovine-only’ interpretation used for certification of cattle for intra-EU trade help reduce the likelihood of false negatives.

4.3 EU law allows the more sensitive IFN- γ blood test to be used in parallel with the tuberculin skin test to maximise the detection of infected cattle, but not as a standalone test. Since October 2006 APHA has deployed the IFN- γ test in England to supplement the tuberculin skin test in all lesion- or culture-positive TB breakdown herds in the LRA and, more recently, in the Edge Area. The IFN- γ blood test is also occasionally applied in persistently infected herds in the High Risk Area of England.

4.4 Part 12 of this consultation document seeks your views on options for allowing IFN- γ testing at the herd owners’ expense, in a limited number of voluntary scenarios outside the current government-funded testing regime. **However, we could make blood testing compulsory for the purpose of statutory post-movement testing, in addition to the skin test. We are keen to receive consultees’ views on the merits of doing so.** For some this may depend, in part, on the costs of the tests. Although the cost of private post-movement IFN- γ testing has not been fully established (since it has not been generally permitted to date) we would expect it to be substantially higher than the cost of post-movement skin testing. That is because, in addition to the APHA laboratory costs, prices would need to reflect the sampler’s time and expenses, the blood sampling kit and courier costs. For further information please see the attached annex summarising the potential costs of introducing the IFN- γ blood test and/or skin test as a post-movement test option.

4.5 Additional post-movement IFN- γ testing could be conducted soon after the arrival of cattle in the LRA, although the problem of lower specificity means that we would need to decide what action to take in cases where an animal had passed a pre- and post-movement skin test, but failed the post-movement blood test. This is also covered in part 12 of this consultation document.

5. Proposed post-movement testing exemptions

5.1 Our proposition is that cattle would not have to undergo post-movement testing if they are slaughtered within 120 days of arriving in the LRA.

5.2 We also propose the following additional exemptions to post-movement testing:

- i. The movement of a bovine animal directly to one of the following premises in the LRA:
 - a market from which all animals go direct to slaughter;
 - an exempt market¹;
 - an approved collecting centre²; and
 - a “Licensed Finishing Unit” specifically approved by APHA (see 8.2 below).
- ii. The movement of a bovine animal to and from an agricultural show that does not involve a stay of more than 24 hours or housing of that animal at the showground, provided that the animal either goes directly from the show to slaughter or is returned directly to its premises of origin after the show.
- iii. Movement to and from a place of veterinary treatment provided that the animal is returned direct to its premises of origin after the treatment, or is killed, or goes directly to slaughter.

5.3 If any bovine animal intended to be moved to slaughter, or to one of the premises listed in paragraph 5.2, remains on the holding of arrival after 120 days have elapsed the post-movement test would be regarded as overdue and movement restrictions would be imposed on the herd until a whole herd check test is carried out at the owner’s expense.

5.4 The Economic Assessment sets out the anticipated impacts and benefits of this control measure. **We invite your comments on our Economic Assessment.**

Part C: Additional proposed measures

6. A more robust approach to dealing with TB breakdowns in the High Risk Area (HRA)

6.1 Currently within the HRA to re-gain OTF status breakdown herds with visibly lesioned or culture positive reactor cattle must have two consecutive clear skin tests, at

¹ Exempt Market - a market approved by APHA to handle and sell cattle moved without a pre-movement TB test. The only permitted destinations are (i) for cattle subject to four yearly testing, an exempt or approved finishing unit, or a slaughterhouse; or (ii) for cattle subject to annual testing, an exempt or approved finishing unit, a slaughterhouse, or back to the farm from which they were brought.

² Approved Collecting Centre – a collecting centre approved by APHA to take cattle from restricted herds. The only permitted destinations are direct to slaughter or under authority of a licence issued by APHA.

minimum intervals of 60 days, before movement restrictions are lifted. Herds in which all the TB reactors have no visible lesions and are negative on laboratory culture only need one clear skin test. However, for the latter herd TB re-infection rates suggest that one herd test with negative results does not provide sufficient assurance that a herd is TB free when it has regained its OTF status. Government believes that the current approach for these “OTFS” (Officially TB Free Suspended) herds in the HRA increases the risk of lifting restrictions before all infected animals have been identified, allowing potentially high risk animals to be moved to other holdings and increasing the already high risk of recurrence of infection in the same herd. The current approach also perpetuates the view that test reactors without visible lesions of TB at post-mortem examination are false positives, whereas the testing odds suggest that they are true positive results.

6.2 The Government’s view is that the current approach to treating breakdowns in the HRA differently, depending on the presence or absence of post-mortem evidence of TB, should change. We are therefore considering the merits of the following approach:

- i. That all new breakdowns in the HRA, regardless of post-mortem or laboratory culture results, will require two consecutive short interval herd tests with negative results, read under severe interpretation, before restrictions are lifted. Thereafter, any further tests that might be necessary would be read under standard interpretation provided that no post-mortem or laboratory evidence of TB is found. This is the policy that currently applies in the TB Edge Area of England.
- ii. In the LRA, by contrast, TB breakdown herds with no post-mortem evidence of disease would continue to require one short interval skin test with negative results at standard interpretation before restrictions are lifted. However, there would be some exceptions to this rule: herds in the LRA that suffer a TB breakdown and are contiguous to another TB breakdown herd with post-mortem evidence of TB, or had a history of any type of TB breakdown in the previous three years, or are permanently subject to annual TB testing by virtue of their business pattern (e.g. hirers of bulls, dealer herds, regular importers of Irish cattle, etc.) will also require two consecutive short interval tests with negative results at severe interpretation.

6.3 To simplify the terminology and counter the perception that lesion- and culture-negative breakdowns represent false positive test results we also propose that APHA no longer distinguish between “OTFS” and “OTFW” breakdowns in official correspondence and notices served to owners of TB breakdown herds.

6.4 If adopted, these proposals would result in some TB affected herds being restricted for a longer period than they would currently, which would have cost implications for the herd owners. There would also be an increase in the cost of TB testing for Defra. However, reducing the risk of leaving residual infection in the herd would bring disease control and financial benefits for the individual farmer, other farmers they trade with, industry and for government. **So, we invite your views on this alternative approach.**

7. Allowing cattle to move to/from rented grazing within a 10 mile radius of the herd owner's home premises without pre-movement testing

7.1 The Farming Regulation Task Force, chaired by Richard Macdonald, was set up in July 2010 to carry out an independent review to identify how to reduce regulatory burdens on farmers and food processors. Its report, published in May 2011, recommended over 200 ways for reducing unnecessary “red tape” and regulatory burdens on farmers and food processors. One of its recommendations was:

‘We recommend that the complex rules for linking premises should be simplified to introduce the same arrangements for cattle, sheep and pigs. Specifically, we propose that ... producers should be able to link premises within a single CPH within a radius of 10 miles of the centre of the ‘home’ premises’

7.2 The Government's view is that it is unnecessary to wait for the implementation of this particular recommendation before allowing cattle to move to and from rented grazing within a 10 mile radius of the herd owner's home premises without a pre-movement TB test. Under the full ‘Macdonald’ reforms, such land could be associated with the home holding for the duration of the grazing agreement or up to a 12 months maximum. As land associations will then be treated as part of that single and permanent CPH for the purpose of livestock reporting requirements - pre-movement testing would cease to apply de-facto.

7.3 In the past farmers could achieve the same end by creating a new Single Occupancy Authority (SOA) that includes the rented land, but these have not been permitted since July 2012 (pre-July 2012 SOAs remain in existence). **We invite your views on allowing cattle to move to/from rented grazing within a 10 mile radius of the herd owner's home premises without pre-movement testing.**

8. Phasing out Exempt Finishing Units in the Low Risk Area

8.1 Exempt Finishing Units (EFUs) are licensed by APHA to allow the purchase of stock for fattening and slaughter from annually-tested OTF herds without a pre-movement TB test. EFUs must meet specific biosecurity conditions to reduce the potential risk of spreading TB to other holdings or local wildlife. They are licensed for one year then subjected to annual re-approval inspections. At the end of last year there were 75 EFUs registered with APHA in England, the majority are located in the HRA but there are 7 in the LRA.

8.2 Veterinary advice is that allowing cattle to move from the annual testing areas of GB into the LRA without a TB pre-movement test risks undermining the efforts of the livestock industry and government to secure OTF status for the LRA. We therefore propose

phasing out EFUs in the LRA over a 12-month period and invite owners of these units to consider applying to become “Licensed Finishing Units” without grazing. Owners would then need to ensure that all cattle of at least 42 days of age sourced from OTF herds in the annual testing areas of GB have been tested with negative results in the 60 days before they are brought into such units.

9. Reducing TB risks from Approved Finishing Units

9.1 Approved Finishing Units (AFUs) in the HRA can help TB affected cattle farmers by providing an outlet for their surplus stock. There are two types of AFUs licensed by APHA to hold cattle from TB-restricted herds: ‘housed’ (there are currently 136 of these) and ‘with grazing’, 100 of which have been licensed in England. Housed AFUs are permitted in all annual TB surveillance areas. AFUs with grazing are only allowed in those parts of the High Risk Area where badgers are considered to be a significant source of TB breakdowns in cattle herds. Rigorous bio-security conditions are included in AFU operating licences and all units are inspected annually to ensure compliance.

9.2 AFU operators in the HRA can source cattle from TB breakdown and unrestricted (OTF) herds. Around 50% of cattle moved to AFUs originate from TB breakdown herds. Once in an AFU, cattle cannot regain their OTF status and can only be moved off to slaughter, either directly or via another AFU.

9.3 Around 20 AFUs with grazing currently include non-contiguous grazing land i.e. separate land parcels surrounded by other farms, natural or semi-natural habitats or settlements. This increases the risk of disease transmission from the AFU herd to other herds, other farmed species and wildlife. Incorporating dispersed grazing land into an AFU is also inconsistent with the policy requirement for an AFU to be a discrete, self-contained cattle unit clearly isolated from other cattle herds.

9.4 To address this control weakness **we propose that an AFU with grazing must comprise only contiguous parcels of grazing land. To enable a transition for the existing AFUs with dispersed grazing land, we propose allowing a 6-month period of grace from the date of publication of this consultation for operators to bring their units into compliance. Until final decisions are taken following this consultation, no new applications for AFUs with non-contiguous grazing land will be approved.**

10. Reducing TB risks from the sale of cattle originating from 4-yearly testing herds

10.1 The number of bovine TB incidents in the LRA of England is very low and similar to that in Scotland. TB breakdowns caused by movements of infected cattle originating in the LRA continue to be relatively rare events. However, the insidious and chronic nature of TB is such that there have been a handful of cases where infected cattle from LRA herds with

no recent TB history record have been sold to multiple buyers. This can have serious consequences for buyers' businesses as well as the seller's.

10.2 Pre-movement TB testing is not mandatory for herds subject to routine four-yearly surveillance testing. To support the strategic objective of achieving OTF status in the LRA by 2019, we have been working with an industry group to develop a voluntary scheme to mitigate the risk of TB transmission via dispersal sales (and other sales of large groups of cattle from a single herd) from 4-yearly tested herds. The aim would be to encourage eligible cattle keepers looking to sell a sizeable proportion of their herd to take advantage of a Defra-funded TB herd check test before presenting animals for sale.

10.3 We would like to pilot such a scheme to gauge likely levels of uptake and the impact on this specific disease risk. But further work is required to fully develop a specific proposal. In particular, we need to:

- Decide on eligibility criteria for a Government-funded pre-sale TB check test – based on factors such as lot size, type of animal and time since the last negative TB herd test on the farm of origin.
- Identify how best to encourage uptake.
- Determine the likely cost for Defra.
- Decide how success should be measured, the length of the pilot and how to modify the proposed voluntary scheme in response to the uptake.

10.4 We are keen to hear views on this proposal from herd owners, vets, auctioneers and other stakeholders.

11. Enhanced TB surveillance in the Edge Area

11.1 In January 2014 enhanced TB surveillance of cattle herds was introduced around herds in the Edge Area of Cheshire and Derbyshire that had had their official TB-free status withdrawn. All herds within (or straddling) the 3km radius around a visible lesion or culture-positive cattle herd breakdown are subject to an immediate skin check test (the radial test), followed by a further test six months later before reverting to annual surveillance testing. Through this enhanced surveillance we aim to find disease earlier and reduce the risk of TB spread in the Edge Area by identifying and restricting the movement of infected cattle

11.2 Radial testing remains in place in Derbyshire to supplement background annual herd testing. But since 1 January 2015, in lieu of annual and radial testing, herds in the Edge Area of Cheshire have been subject to six-monthly whole herd testing. This change was made because the high TB incidence in that part of Cheshire during 2014 meant that significant numbers of radial tests were generated by new TB breakdowns with several farms caught within two or more radial test zones over a short period. Compared to radial

testing, six-monthly testing is simpler to administer in an emerging TB area and provides farmers with greater clarity about when their herds will be tested and the disease status of their herd.

11.3 Experience from the first year of radial testing in the Edge Areas of Cheshire and Derbyshire indicates there could be benefits in rolling out radial (or six-monthly) testing to other counties in the Edge Area. It would improve our understanding of transmission routes for TB in these counties and ensure earlier identification of disease. Veterinary advice is that six monthly herd testing should apply to those parts of the Edge where there has been the greatest increase in the number of new infected herds in 2014 compared to 2013. Further radial testing could be considered in the Eastern parts of the Edge Area, where the epidemiology of TB is more similar to that in the LRA.

11.4 Delivering this would increase (in the short term) costs for government and disrupt affected herd owners. **So we are inviting views before deciding whether to undertake a full analysis of these proposals and issue a subsequent consultation on specific measures.**

12. Situations in which private interferon-gamma (IFN- γ) blood testing could be permitted.

12.1 There are currently two TB diagnostic tests used (on any scale) in England:

- the single intradermal comparative cervical tuberculin (SICCT) test (the skin test); and
- the supplementary interferon-gamma (IFN- γ) blood test (BovigamTM).

12.2 The IFN- γ blood test is more sensitive, but less specific than the skin test, meaning it is more likely to identify an infected animal as positive, but it is also more likely to generate a false positive result. Because of this, it has so far been used in conjunction with the skin test, mainly to enhance diagnostic sensitivity in lesion or culture-positive TB breakdown herds in an attempt to clear the infection from those herds more quickly.

12.3 Since October 2006 the IFN- γ test has been applied as a supplementary test in specific situations. It is used systematically in all new lesion or culture-positive TB breakdowns detected in the Edge and Low Risk Areas of England, and at APHA's discretion in other circumstances and areas. Around 67,500 government funded IFN- γ tests were carried out in England in 2014, with just over 2,600 (3.9%) of those giving positive results and leading to the removal of those animals as TB reactors.

12.4 We are exploring scenarios in which private IFN- γ blood testing (funded by the herd owner) could be used as an additional tool to mitigate the risk of bringing (or leaving) infected cattle in herds. This would be subject to the herd owner or private vet receiving

the necessary written authorisation from APHA, as required by article 13(3) of the Tuberculosis (England) Order 2014.

12.5 We are seeking your views on the circumstances in which a private IFN- γ test might be useful. Herd owners could only be permitted to apply for the test in a limited number of situations, mainly where they are seeking (and are willing to pay for) additional assurances as to the TB-free status of animals they are buying or selling. These circumstances could include, for example:

- supplementary pre or post-movement TB testing of cattle that are not subject to (or have passed) a compulsory pre-movement skin test;
- TB screening of animals joining “high-value” herds, including pedigree bulls entering semen collection centres;
- a marketing tool for herds/animals intended for sale;
- ad hoc testing of herds/animals following a negative routine or tracing skin test;
- private rapid re-testing of inconclusive reactors (IRs) to a skin test;
- supplementary testing of non-reactor cattle in TB breakdown herds (i.e. animals that have passed a short interval skin test and do not qualify for a government-funded parallel IFN- γ test).

12.6 As with private tuberculin skin testing, each request for a privately funded IFN- γ test will have to be approved by the relevant APHA office in advance and the results immediately reported to that office, as required by article 13(3) of the 2014 Order.

12.7 Permission will not be given for private IFN- γ tests on cattle that have already been designated as reactors to a test for TB (skin or IFN- γ) and are awaiting slaughter. For test-negative animals in herds under TB restriction, APHA will consider on a case by case basis requests for private IFN- γ testing that are outside of the standard government testing regime.

12.8. If a private IFN- γ test is regarded as positive, the reactor animal would be slaughtered and the keeper compensated by Government. The herd would have its OTF status removed and one or two skin tests with negative results would be necessary to restore the OTF status of the affected herd.

Part D: Update on other policy developments

13. Piloting the use of TB risk rating scores for cattle herds, to support Risk-Based Trading

13.1 APHA has developed a system which enables a TB risk rating score to be derived for every cattle herd in the country, on a scale of 1 – 5 (1 being the lowest risk). This is based on analyses of a herd's TB history (time since last breakdown) and cattle movement history. These scores could potentially be used by farmers to support risk-based trading, i.e. informed pre- and post-purchase decisions. The scores would be particularly useful for distinguishing between higher and lower risk herds in the HRA where, currently, all herds in the area are often perceived to be high risk, despite the fact that many of them have never had a TB breakdown.

13.2 In Spring 2014 the TB risk ratings scores were tested in two small farmer focus groups and, on the basis of feedback, we enhanced the scoring system with new input data from 1st January 2008 to 1st January 2013. We are now planning to run a pilot scheme involving two distinct counties. We would issue scores to all herd owners in one of the counties in the Edge Area and one of the counties of the HRA. We suggest that the counties chosen should have a significant level of internal trade, to maximise the opportunity for farmers to use the scores in a trading context.

13.3 Through the pilot we would expect to get a better understanding of the appetite among cattle keepers for using the scores to support risk-based trading, and how such scores might be further developed to benefit cattle buyers in the future. Building on feedback from the pilot we would aim to roll out the risk scores across England in 2016.

14. Sharing TB breakdown information

14.1 On 30 June 2015 we launched a freely accessible online interactive mapping tool ('ibTB'), www.ibtb.co.uk, showing the location of ongoing TB breakdowns and TB breakdowns resolved in the previous 5 years. The information will be updated on a monthly basis.

14.2 We have launched this website because many farmers, vets and their representative organisations have made it clear that they want government to share more information about the local TB situation, so that cattle keepers are better aware of the disease risks to their herds and can take appropriate precautions.

14.3 To find out about the disease situation in a particular area, stakeholders are able to centre the map using a CPH or post code. Herds with TB breakdowns are shown as points on the map displaying the starting and, where appropriate, end dates of the breakdown. Names and addresses of TB affected cattle keepers are not published.

15. Regular publication of TB epidemiological reports for the LRA and Edge Area

15.1 In response to the increasing demand from industry for government to share more information about TB, we are now publishing the APHA field epidemiology reports for the various counties in the Edge and Low Risk areas of England. Once similar reports become available for the HRA (in 2016) our intention is that these will be published too.

15.2 These reports, to be updated and published two to three months in arrears every six months, will provide a more detailed overview of the disease situation in each region or county of the LRA and Edge Area. This will supplement the monthly National TB Statistics for GB and the APHA Annual bTB Surveillance Reports for England and GB. Individual TB breakdown herds will not be explicitly identified in these reports.

Part E: Tell us what you think

16.1 If you wish to respond, please submit your comments by **23 October 2015**.

16.2 You can respond in one of three ways.

- **Online** by completing the questionnaire at <https://consult.defra.gov.uk/bovine-tb/bovine-tb-cattle-controls-post-movement-testing>
- **Email** to bTBengage@defra.gsi.gov.uk
- **Post** to:
Defra
Cattle Measures Team
Area 5D, Nobel House
17 Smith Square
London SW1P 3JR

16.3 Our preferred method is online because it is the fastest and most cost-effective way for us to collate, analyse and summarise responses. If you require a different format please let us know.

16.4 Given our obligations under the Freedom of Information Act, the responses we receive may be published. If you do not wish to be identified as the author of your response, please state this clearly.

16.5 Final decisions on whether to proceed with the proposals will be made by Ministers.

ANNEX

Potential industry cost of introducing both the IFN- γ blood test and skin test as a post-movement test option

Key points

- Total estimated cost to industry of skin testing only of £1.6m per year, equating to an average annual cost of £450 per business.
- Total estimated cost to industry of IFN- γ blood and skin testing of £5.4m per year, equating to an average annual cost of £1.5k per business.
- Overall the benefits from introducing both types of test as opposed to the skin test alone are likely to be broadly the same (around £0.4m per year).

Summary

Farmers in the Low Risk Areas (LRA) would be responsible for arranging and paying the costs of testing of all cattle moved from annually tested area (ATA) herds in England and Wales to live (i.e. not slaughtered within 120 days) in the LRA. The costs of testing include vet fees, farmer time for gathering and presenting animals and any impact on productivity.

Cattle moves

Defra statistics show that around 148 thousand animals moved annually on average to the LRA from the annually tested areas of England and Wales (RADAR dataset, 2011-2013). Of these, an estimated 126 thousand stayed on farms for longer than 120 days and so would be in scope of this measure.

Testing costs (2014 prices)

The estimated cost of the more sensitive but less specific IFN- γ blood test is £33.50 per animal; based on an average cost of a gamma test of £30.12, plus £3.34 for farmer time/productivity loss (Animal and Plant Health Agency gamma test cost Review, 2009). The average cost of the tuberculin skin test is £13.60 per animal; based on an average test fee of £10.23 plus £3.34 for farmer time/productivity loss (Pre-movement test Review, 2010). Therefore the total cost of using a skin test supplemented by a gamma test is close to £47 per animal.

Farmer behaviour

It is likely that introducing this measure would lead to some change in behaviour as farmers become more aware of the risks of moving animals into the LRA and switch their buying location to avoid paying the costs of testing. The extent to which businesses may

switch to buying cattle from within the LRA as opposed to the ATA is uncertain; and affects the costs by changing the number of animals required to test.³

To assess the potential change in behaviour we use a range of 0-34% (midpoint 17%) based on the Scottish evidence showing the proportion of imports from annually tested areas fell by about one third after the introduction of pre and post-movement testing in Scotland. Some of this may have been for reasons unrelated to the policy and we cannot say with certainty what proportion was attributable to pre and/or post movement testing. Given that Scotland introduced both pre movement and post movement testing together, then the 34% figure likely reflects an upper bound of the impact of introducing post-movement testing alone on where buyers source their cattle.⁴

Table 1 shows the range around the number of animals which are still moved and those which are switched from the ATA to businesses in the LRA:

Table 1 – Number of animals moved and those which are switched to the LRA

Test type option		Number of animals		
		34% switch	17% switch	0% switch
	Bought from ATA	83k	105k	126k
	Bought from LRA	43k	21k	0k
	Total	126k	126k	126k

Farmers that switch buying location are likely to incur some cost such as time spent searching for replacements, or if cattle are more expensive than previously. Yet, it is logical to assume that these costs would be less than the costs of testing; otherwise farmers are less likely to choose to switch and instead incur the cost of post-movement testing. Some farmers which switch may incur no additional costs. While there is no data on the cost of switching to inform an estimate, to illustrate its potential impact on the overall cost of testing options, we assume it is approximately half of the cost of testing cattle.

Total costs

Taking the number of animals moved or switched from the ATA in table 1 and multiplying by the cost per animal gives the total costs to industry (table 2).

³ It is reasonable to assume that the relatively more expensive option of using both the skin and blood test would likely led to a greater change in behaviour than that presented under the use of skin testing alone (option 1 of the Impact Assessment), as cost per business will be more significant (see impact assessment for full details).

⁴ However, as this was based on the introduction of the SICCT skin test alone, which is less expensive than gamma, it may not hold that this is upper bound.

Table 2 – Total yearly costs to industry per year

Cost scenario	Cost item	(No. of cattle) x (Cost per animal)	Cost	Total cost
Low (34% switch)	gamma + skin test	83k x £47	£3.9m	£4.8m
	Switching buying location	43k x £23	£0.9m	
Central (17%)	gamma + skin test	105k x £47	£4.9m	£5.4m
	Switching buying location	21k x £23	£0.5m	
High (40% switch)	Gamma + skin test	126k x £47	£5.9m	£5.9m
	Switching buying location	0 x £23	£0	

Table 2 shows the total cost to industry in the central scenario of £5.4m per year, with an average annual cost of £1.1k per business.⁵ This compares to around £1.6m per year under the skin testing option 1 presented in the Impact Assessment, and an average annual cost of £0.5k per business.

Benefits

Introducing post-movement testing will lead to benefits to businesses from finding disease earlier through testing or preventing diseased cattle moving into the LRA, saving on additional disease control costs. For skin testing these are estimated at £0.4m per year in avoided economic loss due to the loss of slaughtered cattle, movement restrictions and having to present their animals for repeated testing. There is also the benefit of reduced risk of disease spilling over into neighbouring farms of £52k per year in avoided control costs. Total benefit from skin testing is £1.1m per year.

The more sensitive gamma test is likely to find a greater number of reactors and so increase the benefits. However, there are a limited number of breakdowns in the LRA (around 40 confirmed on average per year (2011-14)),⁶ and so the size of the benefit is constrained. The gamma test is less specific than the skin test and so will increase costs to some farmers where cattle are falsely identified as infected and slaughtered.

Cost benefit

Overall the benefits from introducing the skin and gamma test as opposed to the skin test alone are likely to be broadly the same. The cost for industry of introducing both types of test is more than three times greater than the cost of skin testing only.

⁵ Total cost of £5.4m per year divided between some 3.5 thousand businesses in the ATA, gives an average annual cost to business of approximately £1.5k.

⁶ Animal and Plant Health Agency APHA (2014), Bovine TB annual surveillance report: <https://www.gov.uk/government/statistics/bovine-tb-surveillance-in-great-britain>



© Crown copyright 2015

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.2. To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2/ or email PSI@nationalarchives.gsi.gov.uk

This document/publication is also available on our website at:

<http://gov.uk/defra>

Any enquiries regarding this document/publication should be sent to us at:

bTBengage@defra.gsi.gov.uk or

Cattle Measures Team Defra
Area 5D, Nobel House
17 Smith Square
London
SW1P 3JR