



Department
for Environment
Food & Rural Affairs

Government and the cattle industry working together to improve Bovine TB biosecurity

A progress report and next steps

A joint publication by Defra and the Welsh Government on behalf of the government and industry partnership group

18 December 2018



© Crown copyright 2016

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.3. To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ or email PSI@nationalarchives.gsi.gov.uk

This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at

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

www.gov.uk/defra

Contents

Executive summary	5
Our new Action Plan	6
Guidance and information for cattle keepers	6
Education and training.....	7
Communications	8
Policy.....	8
Evidence	8
Introduction and overview	9
Background to the 2014 TB Biosecurity Action plan.....	9
Welsh Government.....	9
Current and future measures	11
Tailored advice	11
5 Point Plan - England.....	15
TB Hub website – England and Wales	16
Biosecurity Information sheets (currently on TB Hub) - England.....	18
Information bTB – England and Wales.....	19
Case studies (TB Hub) - England.....	21
Auction markets – England and Wales.....	21
College teaching and training online modules – England and Wales.....	22
Vet training – England and Wales	24
On farm demonstration events – England and Wales	26
Risk based trading/Informed Purchasing – England and Wales.....	27
Equipment Grants – England and Wales	28

Accreditation and farm health schemes – England and Wales	29
Biosecurity promotion – England and Wales.....	30
Roles and responsibilities – England and Wales.....	30
Attendance at shows – England and Wales	31
Communication and engagement approach - England	32
Data collection - England	33
Evidence review and ‘TB Biosecurity Policy: Evaluate, Review and Recommend’ work stream - England.....	34
‘TB Biosecurity Policy: Evaluate, Review and Recommend’ work stream.....	34
Annex A: 2014 Action plan.....	37
Knowledge and data.....	37
Evidence	37
Communication	37
Education and training.....	37
Equipment.....	38

Executive summary

The goal of ridding England and Wales of bovine TB is one that is shared by all parts of the cattle industry as well as the Welsh Government and Defra. No single measure will achieve that goal but there is no doubt that effective biosecurity has an important part to play, as clearly explained in both the Wales Bovine TB Eradication Plan and the recent Defra Bovine TB Strategy Review, led by Professor Sir Charles Godfray.

In 2014 a Biosecurity Action Plan containing 15 actions (listed at Annex A) was launched jointly between industry representatives (NFU, BCVA, AHDB, and Landex) and Defra. The following report summarises progress against these actions and brings together evaluation and stakeholder input to determine successes and lessons learned. Although the Welsh Government was not involved in the Biosecurity Action Plan in 2014, they have since played an important role in developing the joint policies and projects outlined in this report.

The assessment of progress against the 2014 actions is informed by the contribution to, and feedback from, participants at a TB biosecurity workshop devised and delivered by Dr Ruth Little, University of Sheffield and held at the Royal Agricultural University on 27th and 28th June 2017. Views were given at the workshop about the actual and potential value of resources including the TB Hub, case studies, the “Five Point Plan” and the Information BTB online mapping tool. The importance of effective communications was highlighted as a key issue, it was felt that more consistent communications and a strategy for highlighting and promoting key biosecurity information was needed.

This report sets out 20 new actions, some of which are continuations or developments of the 2014 actions. These cover a wide range of initiatives loosely grouped under the following headings: guidance and information resources; education and training; communications; policy; evidence; and data collection.

These new actions provide further evidence of the joint commitment of industry and government to improve bovine TB biosecurity and are presented in partnership with AHDB, Defra, Welsh Government, Landex, NFU, and BCVA.

Our new Action Plan

Guidance and information for cattle keepers

England

Action 1: 5 point plan - we will continue to promote the 5 Point Plan as widely as possible, including via the TB Hub page and distribution of the 5 Point Plan leaflets.

Action 2: TB advisory services - in England, under a contract which runs until October 2020, farmers will continue to have free access to telephone advice and one to one advice visits to farms in the HRA and Edge areas to reduce the incidence and impact of TB breakdowns.

Wales

Action 3: Refreshed TB Eradication Programme in Wales - in October 2017 an enhanced programme was introduced in Wales which intensifies and builds on existing measures.

The overarching programme document sets out how the eradication programme contributes to the Welsh Government's long term vision for animal health and welfare.

The programme is implemented by a Delivery Plan which sits under the overarching document. The Welsh Government are taking a regional approach to eradication by establishing Low, Intermediate and High TB Areas which are based on incidence of disease. The Delivery Plan provides the details of the controls applied in each area. It is flexible to changes in the TB picture and will be regularly updated.

A **Questions and Answers** document has been produced which covers the answers to the most frequently asked questions around the current policies being implemented in Wales. This document can be found at www.gov.wales.

Action 4: Cymorth TB - farmers, whose herds are under TB restrictions, will continue to have access to the Cymorth TB Programme's support and advice. Cymorth TB has recently been expanded to provision of 'Keep it Out' visits to farmers whose herds test clear to a contiguous test in the Intermediate TB Area North.

Action 5: Delivery partners - private vets play a pivotal role in ensuring the health and welfare of animals in Wales. **Iechyd Da (Gwledig) Ltd.** and **Menter a Busnes** are contracted to deliver TB testing in Wales. Through *Cymorth TB* we are seeking to enhance the role for private vets in the management of TB.

England and Wales

Action 6: Improving understanding of risk by mapping the location of TB

breakdowns - we will enhance the Information bTb website, increasing its scope from a simple interactive mapping tool of bovine TB outbreaks to a resource focussed on the provision of data to help owners better understand and manage the risk to their herds.

Action 7: Sharing experiences through case studies - we will publish further simple, accessible biosecurity case studies to highlight real successes and lessons learned on working farms on the TB Hub.

Action 8: Technical biosecurity Information sheets - we will continue to produce biosecurity information sheets on actions which can be taken to reduce TB risks. We will explore the appetite for distributing printed versions of these, for example at auctions and shows.

Action 9: Making the TB Hub website the go to place for biosecurity advice - we will ensure the TB Hub provides accessible, easy to understand and proportionate biosecurity advice and guidance. We will enhance the structure of the TB Hub making it easier for farmers and others to find the information they need.

Education and training

England and Wales

Action 10: College/University teaching and training - we will continue to produce and update teaching and training materials and identify wider opportunities for these to be used. This will include recognising the part they could play in supporting the continuous professional development of prospective, new and experienced farmers and farm workers.

Action 11: On farm demonstration events - we will consider the merits and design of further on-farm practical demonstrations of the biosecurity measures recommended in the five point plan.

Action 12: Equipping vets to support their clients - we will consider how best to provide accessible information and learning materials for vets - including through use of TB Hub material, college/university learning packages, and face to face learning.

Communications

England

Action 13: Communication and engagement approach - we will develop a government/industry communication and engagement strategy to better promote biosecurity messages and available resources.

Action 14: Maintaining a presence - we will take advantage of our organisations' presence at shows to promote biosecurity and we will explore further and wider use of communications at livestock auction markets.

Action 15: Biosecurity promotion via other organisations - we will consider what part third parties (including supermarkets and farm assurance schemes providers) can play in helping to promote good biosecurity.

Policy

England and Wales

Action 16: Understanding risks of bringing new cattle into herds - we will assess the potential for greater information sharing to aid decision making by buyers at auctions and farm to farm sales.

Action 17: Accreditation schemes - we will consider how accreditation and farm health schemes could better support biosecurity.

Action 18: Equipment grants - we will determine whether the cost of biosecurity measures is an obstacle to uptake and, if so, how best to overcome the obstacle.

Evidence

England

Action 19: Evidence review and social research - we will commission an evidence review and share relevant findings that could be used to inform future policy making. We will undertake a program of social research into farmer attitudes towards biosecurity take up, to fill evidence gaps, evaluate policy and provide more timely data.

Action 20: Evaluation - we will evaluate the reach and effectiveness of current and past initiatives, through follow up studies by the providers and as part of the social research work stream.

Action 21: Data collection - we will seek opportunities to collect information on the biosecurity measures farmers have successfully employed.

Introduction and overview

Background to the 2014 TB Biosecurity Action plan

In England, the government's TB strategy aims to achieve officially TB free status for England by 2038, while maintaining a sustainable livestock industry. Part of the strategy included a commitment to improve TB biosecurity, addressing the reality that there are many potential sources of TB infection for cattle.

- Off farm, during transportation or where cattle are gathered together
- On farm, from cattle to cattle- within a herd or between neighbouring herds
- On farm, between cattle and wildlife - cattle coming into contact with wildlife or infection left by wildlife

In response to this a workshop on bovine TB and biosecurity was held in April 2014 which included farmers, vets, academics and other relevant organisations. The discussion formed the basis of work to develop, design and promote measures to reduce cattle-to-cattle, cattle-to-badger and badger-to-cattle spread of bovine TB and led to agreement on a joint Defra and industry [Biosecurity Action Plan](#)¹, published in December 2014. The plan contained 15 actions which were taken forward jointly by industry representatives (NFU, BCVA, AHDB, and Landex) with Defra and APHA. The list of the 15 actions 2014 actions can be found at Annex A.

The Action Plan has been the basis of much of the work on bovine TB biosecurity since then. This progress report seeks to take the government and industry partnership on biosecurity to the next phase, in line with both the Wales TB Eradication Plan and the findings of the TB Strategy Review carried out for Defra by Sir Charles Godfray and his team.

Welsh Government

In Wales in 2017 the Welsh Government implemented a refreshed programme, key to which was establishing a regionalised approach to tackling the disease. To supplement this approach the Cabinet Secretary for Environment, Energy and Rural Affairs, Lesley Griffiths, has now set targets for eradication in each of the TB Areas. The national eradication target emerges on the basis of the regional targets being achieved. When all

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388100/cattle-biosecurity-action-plan.pdf

regions become Officially Tuberculosis Free (OTF), it follows that Wales will be OTF as a whole. If we achieve the targets that have been set Wales will be OTF by 2041.

The Welsh Government are committed to working with Defra and industry to improve biosecurity standards in Wales through the initiatives set out in this document. Although not all of the 15 actions from the Biosecurity Action Plan are applicable to Wales, we will be working in partnership to implement joint projects where appropriate.

Royal Agricultural University (RAU) workshop

A stakeholder workshop was convened to critique progress and establish direction for future strategy. This took place at the Royal Agricultural University in Cirencester on 27th and 28th June 2017. Over forty stakeholders from the farming, veterinary, wildlife and academic sectors attended.

The workshop reviewed the previous actions and assess what further biosecurity activities are required to improve farm resilience to bovine TB. Strengths, Weaknesses, Opportunities and Threats analysis (SWOT) was used to gather views on all the initiatives undertaken since the 2014 actions plan's release. The revised set of actions presented in the following report are strongly influenced by the findings of the workshop.

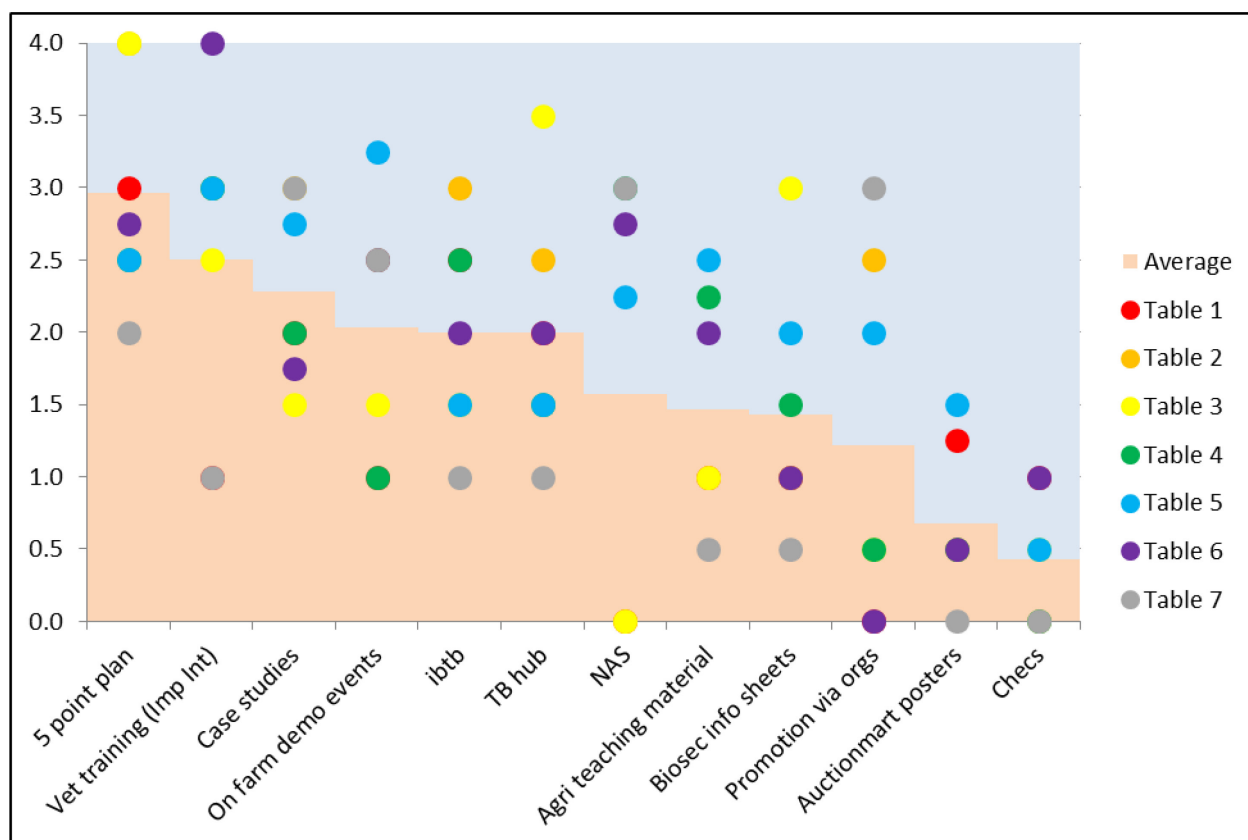
At one point, attendees of the workshop were split into groups and asked to score the perceived effectiveness of current initiatives out of 5, then discuss why they have given that rating. The average and individual table scores are listed in Table 1, and ordered from highest to lowest average score.

Participants of the workshop were generally positive about educational resources such as the TB Hub, case studies, information sheets, the Five Point Plan, the interactive mapping tool ibTB; and the provision of veterinary training and educational materials for agricultural colleges. It was felt that further work is required in promoting and making these resources available to a wider audience.

Reservations were expressed about the effectiveness of the CHeCS herd accreditation and similar assurance schemes to encourage farmers to improve their biosecurity. These were regarded as a suitable for a limited audience, including pedigree breeders, rather than having the broad appeal required to make a real difference to TB control. Assurance schemes, on the other hand, were considered to lack a joined-up approach on biosecurity and require standardisation to be considered practical and effective.

Effective communication was felt to be a key issue, affecting both the success of efforts to control the disease, and success of the actions developed in the 2014 action plan. There was a desire for consistent communications and a strategy for highlighting available resources, knowledge sharing and promoting key biosecurity information.

Figure 1: Overview of scores for key biosecurity initiatives



Current and future measures

Tailored advice

England TB advisory service (telephone advice and one-to-one farm visits)

In October 2017 a three year contract to run a TB advisory service (TBAS) was agreed by Defra. This service is funded by the Rural Development Programme for England (RDPE).

The aim of the service is to improve the productivity of the national herd by reducing the incidence and impact of TB breakdowns in the High risk and Edge areas through better informed farmers.

- The service will offer a total of 2,400 on farm advice visits and 1,950 telephone advices in the HRA and Edge areas over the 3 years.
- The service is tailored to providing advice on how to improve on-farm biosecurity and reduce the risks from cattle movements and trading.

- Trained advisors in all aspects of bovine TB will tailor advice to suit an individual farmer's business structure and needs.
- Following a farm visit the advisor will
 - Prepare an action plan to improve or maintain the biosecurity and trading status of the farm.
 - Share this plan with the farmer within one calendar month of the visit.
- Advice is based on the biosecurity 5 point plan.
- In the Edge area advice is on a 'prevent and protect' basis, equipping farmers with knowledge on biosecurity and how they can control the spread of the disease.

2017 Biosecurity Workshop conclusions

A key message from the 2014 workshop was the need for tailored, one-to-one advice for farmers to help them deal with and build resilience to bovine TB on their farms. In anticipation of the Service commencing in autumn 2017, workshop participants were asked for their views on how to maximise the chances of success of the Service. Discussions focused on effective ways to engage with farmers (ensuring the services are available to those who need them) and ways to measure the success of actions and the uptake of the service.

Discussions covered the geographical focus for the Service, who should be involved and how. The view was that farms with a TB breakdown in the High-Risk Area (HRA) and farms in the Edge area should receive the greatest attention. Providing something in addition to the support offered by APHA was considered important. The interactive TB mapping tool, ibTB, should be used to identify new breakdowns and guide the strategic deployment of resources. There is a need to recognise that the Low-Risk Area is vulnerable and so they should not be discounted from receiving biosecurity advice.

A clear message was there should be a '*team approach*', primarily involving the farmer and their vet, but also considering working through other influential individuals and organisations (e.g. feed suppliers, business consultants, Farming Community Network, NFU, AHDB and British Cattle Veterinary Association). Involving farmers' private veterinarian - through either consulting or attending the visit - was viewed as being both productive and diplomatic, recognising their role as a trusted advisor. Vets could be incentivised to attend visits through receiving accreditation or financial recompense for their time.

Advisors should identify and speak with the primary decision-maker on the farm to maximise the likelihood that biosecurity advice will be put into practice. Identifying *early adopters* and *farmer champions* within communities would help to communicate the successes and benefits of the Service, as well as building the credibility of what is being

offered. Training of advisors will be important. To develop a good reputation, the advice needs to be sensible, implementable, costed and practical, and the advisors need to 'speak farmers' language'. Evidence on the effectiveness of measures should be provided and advisors should help farmers to prioritise the measures that will have maximum effect in improving the farm's resilience to TB. The advice should be tailored to individual farms, recognising the different needs of different farm holdings. The overall approach of the Service should be to target communities rather than individuals in order to encourage uptake and adoption of biosecurity measures.

In cases where advice has led to a successful outcome, this could be advertised in the form of a case studies to further enhance the reputation and credibility of the service.

The workshop participants were asked for their views on how to maximise the chances of success of the service through advertising, engaging with farmers and measuring success. Possible measures of success:

- Number and type of recommendations implemented.
- Number of calls to the service (assess demand for the service).
- Number of advice visits and telephone calls delivered.
- Individual success stories – case studies.
- County 'league table' of uptake of the service.
- Farmers' opinion that they have been offered good practical advice.
- Longer term measures would be reducing the number of TB herd breakdowns and farms staying free of TB.

Future direction

For a three year period, beginning October 2017, the contractor will provide telephone advice and farm advice visits to farms in the HRA and Edge areas to reduce the incidence and impact of TB breakdowns.
--

With the contract for this work awarded, the future direction of TBAS has already been agreed.

The way in which the advisory service will interact with other initiatives, such as the TB Hub, is discussed at various places throughout this report.

The Low Risk Area of England (LRA) is currently not eligible for advice from TBAS. There is a need to ensure LRA farmers and others know where to go for advice. This is discussed in the section on the TB Hub.

Evaluation

Measures for reviewing the impact of the TBAS have been built into the contract, including:

- The contractor will contact each farmer no later than 6 months after the visit to see what progress has been made and if they were happy with the initial visit and plan that was prepared.
- The Advisory Service have a target that 75% of recommended actions will be completed within 6 months of receiving the action plan.
- To assess the service the contractor will provide a final report which will include a number of the recommendations made, farmers' feedback and estimated versus actual cost of implementing the recommendations. If recommendations have not been carried out they will need to say why.

Cymorth TB in Wales

The aim of *Cymorth TB* is to provide support and advice to farmers whose cattle have TB. This is to:

- Minimise the impact of the disease on their farm
- Prevent the disease from spreading

The programme is managed by the Animal and Plant Health Agency (APHA) and delivered by private vets subcontracted to the two Welsh Veterinary Delivery Partners. Farmers are offered access to the programme in the form of a voucher which will be provided to them by APHA.

Other *Cymorth TB* programmes – The Welsh Government has developed other *Cymorth TB* programmes providing additional personal, wellbeing support for cattle keepers, contracting with the Farming Community Network.

To address the increase in incidence in the Intermediate TB Area North (ITBAN), additional contiguous testing around Officially TB Free Withdrawn (OTFW) breakdown herds was introduced on 13 November 2018.

To support farmers in this area, government subsidised *Cymorth TB* 'Keep it out' veterinary visits are being provided to farmers whose cattle have tested negative to a contiguous test. These visits will be delivered by local practices via specifically trained vets and will look at the local disease picture, biosecurity, cattle trading policy and making wise buying decisions.

Future direction

A review of Cymorth TB performance and future direction to be carried out by end 2018.

The Cymorth TB programme was rolled out during November 2015. The initial stage implemented the veterinary workstream. A secondary workstream around farmer and farming family welfare was subsequently introduced. Office of the Chief Veterinary Officer (OCVO) officials have met with Veterinary Delivery Partners, APHA and Training providers regularly to consider progress. It was decided that the end of 2018 would be an appropriate time to review the programme to date and its future direction.

5 Point Plan - England

Guidance and information resources

2014 Action Plan action: We will develop collectively agreed written information, advice and guidance.

The **5 Point Plan** was developed to provide consistent guidance on reducing the risk of TB entering a cattle herd. Protect your herd from TB (five point plan) contains five categories of recommendations on the practical measures that can be taken to reduce the risk of introducing bovine TB into the herd. The five point plan was launched in November 2015 and has been promoted by industry as well as government as part of the wider biosecurity campaign.

2017 Biosecurity Workshop conclusions

The leaflets ranked highest across the groups in terms of perceived effectiveness and it was seen to be a widely promoted resource. While useful, participants felt that the 5 Point Plan 'stated the obvious', except for the information on managing cattle feed and water sources.

Future direction

We will continue to promote the 5 Point Plan as widely as possible, including through the distribution of the 5 Point Plan leaflets.

It would be sensible to continue promotion of the 5 Point Plan with a commitment to periodically review content. We suggest a content review period of once a year, or as issues are highlighted.

We will review where information is being used and distributed. We want to know who they are going to, where they are being distributed and whether they could be expanded to cover additional measures.

TB Hub website – England and Wales

Guidance and information resources

2014 Action Plan action: We will establish a single national Hub for biosecurity (and, ideally, other) information, advice, guidance and research material.

The TB Hub was launched in November 2015 as the central online source for all bovine TB information, advice, guidance and research findings. The main emphasis is biosecurity and risk based trading. It is administered by AHDB.

2017 Biosecurity Workshop conclusions

The TB Hub was regarded as an informative website with lots of useful content, particularly the 5 point plan, case studies and information sheets. It was deemed an advantage that the Hub is not seen a government-led resource.

Suggested improvements:

- Promote the Hub to a wider audience. The Hub should be promoted more effectively, possibly via a communication campaign. In particular, there is still work to do in terms of engaging hard to reach farmers who have the greatest need for the information, but are the least likely to seek it out. The new TB Advisory Service can play a role in raising awareness.
- There should be sign-up options for email alerts and a social media feed to flag to users when new updates are posted.
- The Hub content should be reviewed to make sure that the structure and content are effective as possible. Regular updates are required to keep the content fresh and relevant.
- The case studies and biosecurity information sheets have very informative content so they should be given a more prominent position on the website, with clear signposting to make them easier to find.
- A concern was that there should not be an over-reliance on the internet to communicate biosecurity messages, as some farmers have limited/no access to the internet and broadband speeds in rural areas can be poor. The content could be made available in different formats.

It was suggested that a specialist web designer could make the TB Hub more efficient and easy to navigate.

Future direction

All partners will ensure the TB Hub is operating at a standard that will reinforce its position as the central point for all TB biosecurity advice and guidance.

The website in its current form is serving its function and is fit for purpose. It is a valuable resource and central to the TB strategy. However, there is a need to address some of the points raised and, if possible, dedicating more resource to the Hub to build on its early success.

The Welsh Government is working with AHDB and Defra to expand TB Hub for use in Wales.

Some of the possible improvements have been captured by the project board for the TB Hub. They agreed that the successes of the Hub is essential and that:

- Partners able to do so should offer resource to help develop new material.
- The cost and procedure for a professional review of the website should be investigated, to ensure that content is best placed.
- There should be wider promotion of the Hub in the communication strategy (see separate section in this document).
- Consideration needs to be given for how the Hub interacts with TBAS and Cymorth TB.
- Government partners (Defra and Welsh Government) should include the TB Hub as a tool for their communications work.
- A calendar of events should be added.
- A twitter account was not regarded as necessary.
- An email newsletter or notification system of new updates was not completely ruled out, but resource would need to be investigated.
- The moderation and resource required for a discussion board were felt not to be justified. There are existing online forums.

Also of use would be a flowchart of where particular people can find useful information, for example:

- Vets/ farmers.
- HRA/Edge/LRA in England & LTBA, ITBAs & HTBAs in Wales.
- RBT/ purchasing/ have had a positive test/ neighbouring farm is positive/ general information/ training.
- Should they call TBAS/ consult local TBEG/ advice online.

A wider evaluation of the Hub would be of great use to identify, among other things, who the main users are, what people coming to the Hub for, whether it is meeting their needs and how they came to be aware of the Hub.

Biosecurity Information sheets (currently on TB Hub) - England

Guidance and information resources

2014 Action plan action: We will consider production of recommended standards for equipment designed to aid farm biosecurity, such as cattle feeders and badger exclusion materials

A number of Bovine TB Biosecurity Information Sheets have been produced which are available on the TB Hub. The Bovine TB Biosecurity Information Sheets provide standard guidance for farmers, vets, contractors and cattle industry stakeholders on types of measures available to try to reduce opportunities for direct and indirect contact between badgers and cattle.

2017 Biosecurity Workshop conclusions

- The Biosecurity Information sheets were considered to be informative with very good content.
- A big proportion of the target audience is still unaware of them - it was felt they should be on a more prominent location on the TB Hub.

Future direction

We will continue to produce biosecurity information sheets on the types of measures which reduce the risk of TB. We will explore the appetite for printed and poster versions of these outside of the TB Hub, for example at auctions and shows.

There is a strong case for continuation and enhancement of this useful advice resource. The information sheets aid efforts to ensure consistency of advice and are especially helpful with the introduction of the TB Advisory Service.

There is no immediate need to review content but a suggested review period of once a year, or as issues are highlighted, would be sensible.

The Welsh Government is exploring how to make this information useful to Welsh farmers as part of the review of the TB Hub.

Information bTB – England and Wales

Guidance and information resources

2014 Action Plan action: We will help farmers to understand local TB risk.

Information bTB (ibTB) is a free to access interactive mapping tool showing the location of bovine tuberculosis (bTB) outbreaks in England and Wales over the last 5 years.

2017 Biosecurity Workshop conclusions

ibTB is a useful and easy to use tool, enabling farmers to identify infection in their areas and have an appreciation of risk associated with herds they may wish to buy from. It has improved openness and transparency of the data and has been beneficial in informing purchasing decisions. In some areas it has helped to overcome unhelpful secrecy and facilitated better working relationships

It was felt that ibTB was more useful for farm-to-farm sales rather than at markets sales because the buyer cannot access the information quickly enough while the cattle are in the ring. There is also an issue with accuracy in that the location is based upon ownership of the farm rather than the location of the herd.

Questions were raised as to when the data could be available in 'real time' rather than being updated every two weeks, which could have ramifications for the accuracy of the data.

Participants also suggested useful additions, such as providing a function on the site to challenge the accuracy of the data for specific farm holdings and 'alerts' for breakdowns in specific areas.

Future direction

We will enhance ibTB, seeking to increase its remit from the current function as an interactive mapping tool of bTB outbreaks to a resource that can be used to aid decisions on potential cattle purchases.

Potential improvements might include:

- Extending ibTB to incorporate more data, e.g:
 - A herd's years of TB freedom.
 - Positive identification of TB free farms (rather than by elimination).
 - Other data on the health status of the herd.
 - Relevant movement data.
- Generating reports for different farming businesses.
- Live (or more frequent) updates.
- Bringing other data online and link with other resources, especially the TB Hub and partners' websites (including GOV.UK & GOV.WALES).
- Displaying grazing field locations for a holding, rather than just the registered address.
- Improving the use and practicality of IbTB data at auction, for example a separate screen displaying the information of an animal at the time of auction.

There are practical considerations. Not only the cost and resource required to create the website, also the legal and business implications of providing greater information and risks if information is not accurate.

Evaluation will be important. We would ideally like to know:

- User requirements for ibTB and assessing whether they can be delivered.
- IbTB usage and influence.
- Who users are and what they are they looking for.

Case studies (TB Hub) - England

Guidance and information resources

2014 Action Plan action: We will produce simple, accessible biosecurity case studies to highlight both successes and lessons learned on working farms.

2017 Biosecurity Workshop conclusions

There was good support for the case studies. People found them interesting, informative and digestible. It was suggested that farmers particularly trust the advice of their peers.

It was suggested that a wider range of case studies is required.

As with similar advice sources, it was noted that they are not prominent enough on the TB Hub. Clear signposting is needed.

Future direction

We will continue to produce simple, accessible biosecurity case studies to highlight successes and lessons learned on working farms.
--

There is no case for the withdrawal of this advice resource. There is also no immediate need to change the content. Exploring further cases studies which could be produced, promoted and placed more prominently on the TB Hub is a sensible future action.

The Welsh Government is exploring how to make this information useful to Welsh farmers as part of the review of the TB Hub.

Auction markets – England and Wales

Guidance and information resources

Posters have been put up at auctions in England encouraging farmers to seek information about the history of animals they are buying.

In Wales, posters encouraging farmers to seek information about the history of animals have been delivered to markets in and surrounding the Intermediate TB Area North, as part of the additional measures being introduced in the area to address the unprecedented increase in TB incidents in that area.

To encourage Informed Purchasing in Wales, 10 markets applied for grant funding to improve their equipment and facilities at point of sale, in order to prominently display TB information at sales.

2017 Biosecurity Workshop conclusions

Although they are cheap and an easy way to provide information to a mass audience at an appropriate time, the auction mart posters were not perceived to be having the intended impact. The posters are often overlooked or ignored, often covered up and quickly become tatty. They were not seen as an effective communication route in the busy environment of the auction.

There was no incentive for auctioneers to display or look after posters.

Future direction

We will explore further and wider the use of communications at auctions.
--

Suggestions are that these posters are not currently having the desired impact. The effectiveness, messaging, placement and impact of the posters needs consideration. The re-instatement of posters should follow a review of the content of the posters, and alternatives, such as displaying messages on screens at auction and paying for advertising space in or near sales rings.

There is also the scope for biosecurity messages to be delivered via partner events at auctions.

College teaching and training online modules – England and Wales

Education and training sessions

2014 Action Plan action: We will encourage the provision by land-based colleges of bite-sized vocational and refresher training opportunities on farm biosecurity for farmers and farm workers.

A core set of biosecurity teaching and training materials has been developed. The materials are adaptable and suitable for use in a wide variety of learning situations and for different audiences. This includes classroom teaching for students in land based colleges, schools and universities, vocational training for farmers and farm workers and general knowledge building for staff in the livestock sector.

They can be accessed for free online, with the function to skip straight to relevant sections and include a test at the end.

In Wales, Farming Connect has developed an e-learning module that registered farmers can access. These modules develop existing understanding, knowledge and improve working practices within the individual business.

A new Centre of Excellence for Bovine TB for Wales opened at Aberystwyth University towards the end of 2018, bringing international expertise together with the aim of eradicating the cattle disease. Professor Glyn Hewinson, a world renowned expert on Bovine TB, will lead the center's work. Professor Hewinson was formerly Lead Scientist for Bovine TB at the Animal and Plant Health Agency and has led research into the disease for more than 20 years.

2017 Biosecurity Workshop conclusions

The quality of the information is good and pitched at the right level. The presentation of the information is also good, with photos and easy to read text. Free access is seen as a benefit, as is being associated with the TB Hub.

The flexible modular learning is appreciated by students and lecturers. The modules are perceived as manageable and therefore did not put people off starting them.

A significant strength is that it is a unique route to inform the next generation of farmers and land managers. On the other hand, many lecturers/ teachers who would be delivering the material have little knowledge of bovine TB biosecurity and might not be able to provide additional information and support to interested students.

There was a lack of marketing and ownership. It was questioned who owns this material and who would update it on an ongoing basis.

Evaluation findings

875 people (of which 755 were students) accessed the site between the 1st November 2017 and 31st October 2018. There was a peak during September when students are accessing materials at the start of their course and also during April which is the key revision period for assessments in May and June. There is a quiz at the end of the training module which 145 people have completed.

Future direction

We will continue to maintain the teaching and training modules. We will identify wider opportunities for use of the modules outside agriculture courses and consider opportunities for earned recognition (such as CPD credits) for those who have completed them.

The resource could also be made available to veterinary schools and allied sectors such as feed suppliers, livestock hauliers and product buyers. Agricultural colleges and the relevant departments should be encouraged to make greater use of the materials.

Closer monitoring of the numbers completing the course and the impact it is having needs to be included.

Vet training – England and Wales

Education and training sessions

2014 Action Plan action: We will ensure that private vets have access to detailed guidance on good biosecurity practices and opportunities for training.

We commissioned our training contractors to carry out subsidised training for vets. The objectives of the training were to teach:

- Practical measures to restrict contact between badgers and cattle.
- How to manage cattle feed and water (to reduce contamination by badgers).
- How to stop infected cattle entering the herd.
- How to reduce risk from neighbouring herds.
- How to minimise infection from cattle manure.
- Awareness of the TB Hub and ibTB website as resources.
- How to interpret the TB Farm Level Data Pack.

Attending vets learned how to:

- Identify individual farm risk – how to develop a risk assessment.
- Give tailored advice according to the identified risk.
- Develop a proactive approach to advising their clients on taking action to protect their farms from TB.

The training was oversubscribed and well received by those who signed up. Feedback received was that the badger ecology element of the training was particularly useful as vets often do not have the knowledge/confidence to advise farmers in this subject area. The training provided practical advice that could be implemented on farm with the client. OVs then need to put their knowledge in to practice on farm, and disseminate to colleagues.

2017 Biosecurity Workshop conclusions

Attendees noted that vets have a wide reaching influence and can help target hard to reach farmers e.g. those without internet/mobile phone. They agreed that a face to face visit is often far more productive. Quality assured training is important, however, since it potentially overcomes inconsistent or incorrect advice being given out by private vets.

There were five training events in the series, so relatively few vets received the training. It could be argued that the vets that attended were already interested and engaged on biosecurity and therefore not strictly the target audience. The course was very competitively priced to generate interest and so vets may have signed up purely to boost their CPD hours.

The Welsh Government currently provides training for private vets linked to the Cymorth TB programme. This has established an online module but now also increasingly involves practical on farm training that looks in detail at biosecurity and disease vectors. The organisation of this training forms part of the current review of Cymorth TB.

Evaluation – wider evaluation work

Some evaluation work of these courses has been carried out. It would be useful to evaluate how and when vets are providing biosecurity information to clients – is it mostly at the time of breakdown or when something goes wrong?

Future direction

We will consider how best to equip vets with the skills they need to provide advice to farmers- including TB Hub material, college learning packages, and face to face learning.
--

The contract for the previous vet training has ended. Nevertheless, it is important that private vets are equipped with the knowledge and confidence to give advice on TB biosecurity. There are concerns the training may not have reached the vets that need it most and clarity is also needed on why subsidy is required for further sessions if the demand is as high as reported.

To commit to further subsidisation of this training, sufficient evidence on why this is necessary is needed. Consideration also needs to be given to the extent to which vets could instead use the advisory and training materials available at present, such as those on the TB Hub and college learning packages. If deemed necessary, existing materials could be adapted and added to the TB Hub in an area designated for vets.

It is proposed that the Welsh Government uses quarterly OV meetings, in partnership with APHA and Delivery Partners to provide regular training updates to OVs keeping them abreast of latest thinking, policy and science.

On farm demonstration events – England and Wales

Education and training sessions

In England, practical demonstration of the biosecurity measures recommended in the five point plan, plus biosecurity advice tailored to the relevant risk area to a wide range of people in the farming community.

In Wales, Farming Connect is supporting and complimenting initiatives led by the Welsh Government on improving biosecurity. These activities include demonstrating good practice on farm, where attendees at events would follow strict biosecurity protocol, which highlights and demonstrates good practice. Events are held at various locations including Colleges, Universities and on farm locations. This ensures that the information is cascaded to a wide audience including students, farmers and industry representatives.

2017 Biosecurity Workshop conclusions

Previous farm demonstration events offered good practical learning but many felt the message was still not getting to the hard to reach farmers.

It was noted that some groups felt that farmers who attend these events could already be demonstrating biosecurity measures – i.e. the course was attracting the already converted.

Future direction

In England, we will consider further on-farm practical demonstrations of the biosecurity measures recommended in the five point plan and biosecurity advice tailored to the relevant risk area.

In Wales, the Welsh Government, through Farming Connect, will continue to provide practical on farm demonstrations as well as optimise future opportunities to integrate the Cymorth TB Programme.

Risk based trading/Informed Purchasing – England and Wales

Accreditation

Objectives

Risk Based Trading (RBT) is the concept that buyers of cattle should be able to access appropriate disease data for the animal(s) they are thinking of purchasing. By making an informed decision on the risk that the animal is infected with bovine TB they can better manage the introduction of new cattle into their herds and reduce the chance of a breakdown.

Currently, the provision of this information by sellers is voluntary. The TB Hub advises farmers to ask for, at a minimum:

- Date of the animal's pre-movement TB test.
- Date of the seller's last routine herd test.
- Date of herd OTF status achievement.

2017 Biosecurity Workshop conclusions

Currently the main incentive for RBT is to reduce the likelihood of breakdown, which in itself is not considered sufficient. The provision of information required for informed decisions on potential risk when buying cattle at market is inconsistent. Some traders are providing information but most do not.

There are practical obstacles, including the pace at which animals are sold, the fact that some animals are only registered on the day and there may be no easy place to display such information.

There is a risk of many sellers choosing to withhold information with a voluntary approach. Market owners are not incentivised to include relevant information.

While herd level information was deemed acceptable, individual animal information would be more useful.

There were concerns that higher risk animals could become more attractive to high risk buyers.

Future direction

We will assess the options for better risk based trading, taking account of all partners' views.

We will work with those responsible for relevant IT infrastructure to improve the accessibility of TB risk data.

Continuing with the current approach of encouraging it will have limited impact. Mandatory measures requiring legislation are not ruled out but the costs to business would need to be taken into account.

Options include:

- Provision of information prior to sale/ at point of sale – such as:
 - Date of the animal's pre-movement TB test.
 - Date of the seller's last routine herd test.
 - Date of herd OTF status achievement.
 - Date of last breakdown.
 - Disease history in the buyer's and seller's surrounding area.
 - Previous purchasing history of the seller.
 - The seller's biosecurity measures.
- Measures to overcome the practical difficulties of auction:
 - Auctioneers need access to a live database for individual animals.
 - Auctioneers should be encouraged to read out key RBT-related information.
 - Requirement to use Electronic screens to display information.

In the short-term, ibTB may be used as a baseline for information sharing in auction markets.

Equipment Grants – England and Wales

2014 Action Plan action: We will explore opportunities for providing small capital grants to aid investment in farm biosecurity.

Future direction

We will determine whether the cost of biosecurity measures are an obstacle to uptake and whether grants would be effective in overcoming this obstacle.

Funds have been made available at certain times as part of the Rural Development Programme for England. If and when there are further opportunities it would be helpful to consider whether grants could be administered by an industry body.

In Wales Farming Connect runs the Rural Communities – Rural Development Programme running between 2014-2020. Similar arrangements to those outlined above will be explored.

Accreditation and farm health schemes – England and Wales

2014 Action Plan action: We will develop, and then promote, TB accreditation and farm health schemes.

Cattle Health Certification Standards (UK), abbreviated to CHeCS, is the regulatory body for Cattle Health Schemes in the UK and Ireland and has developed an accreditation standard for bovine TB. There are other commercial and regional herd health schemes in operation.

2017 Biosecurity Workshop conclusions

There is a concern that accreditation is only relevant to higher quality, pedigree herds, rather than a broad range of commercial herds and there are limited incentives for farmers to join.

There is an option for government to offer incentives to encourage participation and development of new schemes appropriate to a higher number of herds, provided these add value to farmers' efforts to control TB on their farm.

Future direction

We will consider how accreditation schemes could provide increased benefit

Evaluation work needs to be carried out to determine the relevant merits of alternative scoring systems.

Biosecurity promotion – England and Wales

There is scope for using farming organisations, such as Farm Assurance, to encourage biosecurity take up.

2017 Biosecurity Workshop conclusions

There was a general feeling that this could be an opportunity to promote good biosecurity via third parties.

In Wales the Cymorth TB programme actively promotes good biosecurity practice and the Welsh Government works closely with the 3 Regional TB Eradication Boards to promote best/affordable practice. Work has been undertaken with the Welsh Veterinary Delivery Partners to develop biosecurity events both for vets and farmers. In the Intermediate TB Area North a large farmer event was promoted and run through the Welsh Government's Farming Connect framework.

Future direction

We will consider where supermarkets and organisations such as Farm Assurance & Red Tractor can be used as an appropriate vehicle for biosecurity promotion.

There is value in continuing to engage with organisations to identify opportunities to promote biosecurity as part of the communication strategy.

The Welsh Government plans to work with the Regional TB Eradication Boards and colleagues from Farming Connect to deliver small scale farmer events focussing on aspects of biosecurity and Informed Purchasing (Risk Based Trading).

There is also an appetite to link good practice and engagement where appropriate to Farm Assured style schemes in novel and innovative ways.

Roles and responsibilities – England and Wales

2014 Action Plan action: We will establish a clearer division of responsibilities between APHA, farmers' own vets and others, so that farmers and others are clear whom to ask for help in prescribed circumstances.

Although many parties are involved with the efforts to eradicate TB, the roles and responsibilities of each group are currently not clearly laid out clearly anywhere.

Future direction

We will develop a clear set of guidelines for the TB Hub, directing farmers to the appropriate place for different advisory needs, both by sector and country.

We will develop guidance for the TB Hub, outlining who should be approached for guidance on what issues, what is on the TB Hub, an overview of the resources, TB advisory service, what your vet can provide you with etc. (also mentioned on the TB Hub action)

Attendance at shows – England and Wales

Communications

All the partners routinely attend shows to engage with farmers and have the opportunity to promote the five point plan and good biosecurity more generally.

Welsh Government officials attend agricultural shows and highlight biosecurity issues, the Royal Welsh Show in particular is prioritised and events are put in place highlighting a particular aspect advancing the biosecurity agenda (in July 2018 year the Welsh Government supported the market testing of an industry developed “biosecurity app” amongst show goers).

2017 Biosecurity Workshop conclusions

This was not discussed.

Future direction

The partners will maintain a presence at shows and events and seek opportunities to work in partnership to promote biosecurity at such events.

These are relatively low cost activities – and could be lower cost still if partners work together at some events at least.

Evaluation work to fully understand impact and effectiveness (and select appropriate events) is important.

The Welsh Government will continue to work with show societies to prioritise best biosecurity practice while supporting a thriving show season.

Communication and engagement approach - England

2014 Action Plan action: We will make better use of existing farm visits to give out good biosecurity advice.

2017 Biosecurity Workshop conclusions

- Plenty of high-quality information sources were developed as part of the 2014 Action Plan. However, work still needs to be done around promoting useful resources. They are not being used to their full potential as not enough farmers know that they are available.
- Communications around bTB are relatively limited at present outside of the promotion of ad-hoc events and training activities and activities discussed in this report.
- The consistency of messaging on TB needs attention - particularly between key disease managers and agencies.
- Partners need to be aware how they are getting the message across – some language can be paternalistic and authoritarian.
- Terminology is potentially confusing in places.
- There is a need to change perception of bTB, which is currently seen as a government owned disease.
- The prospects for making progress on disease eradication are good now that comprehensive programmes are in place, which means there should be more positivity.
- Farmers' responses to new initiatives are difficult to predict – there is potential for social research studies.
- Guidance is needed to help farms stay clear, not just get clear of TB. So communications should target farmers who never had a breakdown, as well as farmers with persistent herd breakdowns.
- There are opportunities for vets to give out biosecurity information routinely when attending farms for all sorts of reasons.

Multiple communications methods should be used to promote biosecurity to a wide range of farmers, including:

- National and local printed media.

- Existing farmer networks - Auction marts, FCN, Agricultural Colleges, Dairy UK, TB Eradication Groups, Young Farmers Clubs, Landlords, Local Authorities.
- Social media advertising via Facebook and Twitter - this would be particularly good for targeting young farmers.
- Private vets – they are the ‘eyes and ears’ on-farm and are a trusted, respected source of advice for farmers.
- Local champions – farmers who have influence and perhaps benefited from implementing biosecurity measures themselves.
- Word of mouth.
- Materials handed out cards during TB testing.
- Adopt trail blazers or early adopters identified to communicate biosecurity successes/benefits.

Future direction

We will collectively develop a communication and engagement strategy to better promote biosecurity messages and available resources.

There is little joined up communication activity at present. Government may need to act as a facilitator of the development of any activity, but with the involvement of other partners. ‘Trusted messengers’ could then act as the brand for any resulting schemes - advertising, social media, communications campaigns, etc.

Data collection - England

Future direction

We will review whether there are opportunities to collect information on the biosecurity measures farmers have employed to date.

Consideration should be given to whether opportunities are being missed to collect information on the biosecurity measures farmers have employed to date. Specifically those in the five point plan.

Evidence review and ‘TB Biosecurity Policy: Evaluate, Review and Recommend’ work stream - England

Evidence

2014 Action Plan action: We will identify, and seek to fill, those knowledge gaps we believe are the biggest barriers to uptake of good biosecurity practices.

2017 Biosecurity Workshop conclusions

Not discussed.

‘TB Biosecurity Policy: Evaluate, Review and Recommend’ work stream.

Future direction

We will commission an evidence review to produce succinct slide packs of relevant findings, suitable for informing future policy making.

To fill evidence gaps, evaluate policy and provide timely data, we will undertake a program of social research, investigating farmer attitudes and biosecurity take up.

We will ensure all future contracts have an evaluation element.

We will evaluate the reach and effectiveness of current and past initiatives; as follow up studies by the providers and as part of the social research work stream.

With a plethora of evidence available, key messages need summarising. In particular with respect to active and future policy, ensuring that policy is evidence led to maximise potential success and impact.

Suggested approach

1. Commission an evidence review to produce some timely and succinct resources of ‘what works’.
2. Based on perceived evidence gaps, launch a program of “TB Biosecurity Policy: Evaluate, Review and Recommend’ work stream. Ideally some form of large scale farmer focussed research, such as a telephone survey or series of focus groups.
3. Use to inform policy, for example attitude change program, if felt appropriate.

Potential topics

- Current levels of understanding of biosecurity, whether farmers know what it means, what the benefits are, what measures are available.
- What information, communication, and education initiatives are working best and whether opportunities to communicate biosecurity messages are being missed.
- Quantify the reach and impact of the various information streams, by assessing understanding and take up levels of different measures.
- Establish: “what works” best in getting people to take up measures:
 - Information and education- What information sources are people using.
 - Regulation- and the impact of regulatory levers.
 - Incentivisation and compensation (or lack of) – e.g. less compensation if people haven’t installed biosecurity, or are trading riskily.
 - Pre and post movement testing.
 - Financial penalties.
 - Movement restrictions.
 - Who the most trusted messengers are.
- Reasons why people are seeking information and taking up measures
 - Through government, vet led, etc. intervention.
 - Are they seeking information, listening when received, or a bit of both.
 - Before/ after breakdown on their farm.
 - Breakdowns on neighbouring farms- or stories in the media.
 - What are the motivating messages?
 - Threat of disease.
 - Cost of a breakdown.
 - Impact on business.
 - Individual responsibility to reducing TB.

- Common barriers to take up, and how strong are they:
 - Financial.
 - Lack of awareness that preventative measures exist, and what they do.
 - Negative attitudes.
 - Lack of trust in measures.
 - Neoliberalism as control rather than choice.
 - Don't believe that it will solve the problem.
 - Don't think their farm is a risk.
 - See as somebody else's problem.
 - Do the incentives for spending the money on biosecurity outweigh the risks (breakdown cost, lost business, including compensation).
 - Regulatory- EG. Aren't allowed to erect a fence, farm door (very unlikely).
 - Necessary behaviour change- what is the level of interruption on current practices- will adapting their farm with biosecurity measures mean they have to change the way they behave.
 - Markets- whether there is sufficient supplier of necessary products- appropriate troughs, badger proof equipment, etc., and a sufficiently active market.
 - Different use of knowledge and ways of communication.
- Means to overcome these barriers.
- Whether awareness, attitudes and uptake changed since the 2014 action plan was launched, and why.
- How attitudes and behaviour insight can be applied to risk based trading.
- Current cattle purchasing behaviour:
 - EG. farm to farm and auction.
 - Regularity.
 - What are the most important factors to farmers when buying cattle.

Annex A: 2014 Action plan

Knowledge and data

Action 1: We will develop collectively agreed written information, advice and guidance.

Action 2: We will establish a clearer division of responsibilities between APHA, farmers' own vets and others, so that farmers and others are clear whom to ask for help in prescribed circumstances.

Action 3: We will establish a single national Hub for biosecurity (and, ideally, other) information, advice, guidance and research material.

Action 4: We will help farmers to understand local TB risk.

Evidence

Action 5: We will generate cost and benefit data for measures considered to be good biosecurity practices.

Action 6: We will identify, and seek to fill, those knowledge gaps we believe are the biggest barriers to uptake of good biosecurity practices.

Communication

Action 7: We will devise a cross-cutting biosecurity campaign.

Action 8: We will make better use of existing farm visits to give out good biosecurity advice.

Action 9: We will develop, and then promote, TB accreditation and farm health schemes.

Action 10: We will produce simple, accessible biosecurity case studies to highlight both successes and lessons learned on working farms.

Education and training

Action 11: We will encourage the provision by land-based colleges of bite-sized vocational and refresher training opportunities on farm biosecurity for farmers and farm workers.

Action 12: We will ensure that private vets have access to detailed guidance on good biosecurity practices and opportunities for training.

Action 13: We will seek to organise a programme of farm visits to highlight the good work that has been done by many working farmers to reduce TB and other disease risks.

Equipment

Action 14: We will explore opportunities for providing small capital grants to aid investment in farm biosecurity.

Action 15: We will consider production of recommended standards for equipment designed to aid farm biosecurity, such as cattle feeders and badger exclusion materials.