Department for Environment, Food and Rural Affairs

The Bovine TB Eradication Advisory Group (TBEAG) for England

49th TBEAG meeting – 18 April 2018

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Introduction

The chair opened the meeting. Apologies were received and noted.

TB Programme Update

The Deputy Director gave an update.

On Bovines: Commitment to introduce the following 3 TB Cattle control policy changes.

Defra is working through the delivery implications for industry, veterinary profession and the government, on surveillance testing in the HRA, with default 6 monthly surveillance testing.

Option of allowing keepers to retain in-calf TB reactors for up to 60 days, subject to a satisfactory VRA and isolation was introduced on 1 May. APHA will discuss this option, available with potentially interested cattle keepers individually.
In June Defra expect to deliver new legislation allowing Defra to pay 50% compensation for reactors that are so unclean that they cannot be processed through a slaughter house.

The compensation Statutory Instrument change in June will also include a provision to better incentivise take-up of the existing option of privately slaughtering TB reactors i.e. Defra would pay compensation for owners of privately slaughtered reactors with condemned carcases.

Defra launched two consultation on the 16th February on Badger Control, both closed on the 15th April. Responses levels were higher than expected and Defra is currently analysing responses. The results will be published in due course.

Badger Edge Vaccination Scheme- following the award of grants to three projects in January [Derbyshire, Nott’s/Laics, Oxfordshire] Defra had hoped to re-open the application window for a second round. However due to budgetary pressures this has not been possible, although we are hoping to open a second application round in 2019 and will confirm by the end of the calendar year. For projects vaccinating in 2018 the alternative BCG vaccine (from Canadian company Intervax) has now been delivered and Defra are in the process of contracting a wholesaler for distribution.

Oral badger/cattle vaccine governance, a meeting took place in late-November 2017 involving TB Programme, APHA and Welsh Government, to review the structure of the oral badger vaccine and cattle vaccine projects and to ensure that responsibility for work streams is more clearly defined. It was agreed that responsibility for the Cattle Vaccine and Badger Vaccine Project Boards would move from TBP to APHA and that an overarching Vaccines Programme Board would be created.

On EU Funding: On our OTF Application, we have now received feedback from the Commission. Commission Officials have taken a strict interpretation of the Directive and would not allow us to exclude ‘imported’ cases from the prevalence figures, meaning we exceeded the 99.9% (of herds OTF) criteria. This is disappointing given Scotland’s application, made on the same basis, and was approved in 2009. Defra are now exploring the option of a self-declaration of OTF status through the World Organisation for Animal Health (OIE).

bTB Strategy Review – was announced just after TBEAG last meeting. The review is up and running and the core working group [TBEAG’s James Wood, Michael Winter, Christl Donnelly, APHA’s Glyn Hewinson; CVO are also feeding in] has now had its first two meetings under Charles Godfray’s leadership. The group was provided with details about the review’s membership, purpose, scope, and timescale. Prof. Godfray is keen to receive evidence and meet key stakeholders. The Secretariat will arrange more formal engagement with TBEAG (and AHWBE) in due course.

Bio-Security: Is on the agenda and will be discussed in detail. TB Programme will present the full set of options Defra are considering for risk based trading. These range from continuing with voluntary and attitude focused approaches, to incentivised options and mandatory interventions.
Update on heritable traits for TB Resistance in Cows and its future value to the Strategy

The group was given an introduction to the research on TB Genetic Evaluation – TB Advantage. EGENES produce the TB Advantage index on behalf of AHDB Dairy and it is used by dairy farmers to select bulls whose daughters are more resistant to bTB. TB resistance has a c9% heritability (Defra/WG funded work in Edinburgh 10 years ago)

- Scheme provides genetic evaluations for bTB resistance (Holsteins since January 2016)
- Uses combined data from APHA (skin test/PME/culture results), BCMS, milk recording data and pedigree data
- Fertility is a low heritability trait (c5%) but you can influence it due to high genetic variability and farmers respond well to this. Fertility is now rising.
- The trait being manipulated by the TB Advantage scheme is the degree of % TB resistance. Predicted Transmitting Ability (PTA) is the average genetic value for a given trait that an animal transmits to its offspring
- TB Advantage PTA is -3 to +3 i.e. as the PTA score increases, the % of offspring (daughters) affected by TB reduces i.e. 6% fewer daughters infected between the PTA extremes
- Although there are only small gains from genetic, they are permanent and cumulative, leading to large gains over 20 years.
- A direct effect is less animals infected i.e. reduced prevalence, shorter TB breakdown periods and the indirect effect is reduced background infectivity (future infections)
- Genetic testing allows removal of the animals most susceptible to TB at a very early age and reinforces the effect of using high PTA scoring TB Advantage bulls
- Most AI bulls score pretty highly for TB resistance as it just so happens that they have been selected for other production/disease traits e.g. mastitis, lameness. Genetic selection for TB resistance will accelerate and enhance this
- Industry take-up of genomic young sires is c70% in the UK now (above 90% in some countries in Europe) and the rate of progress has doubled since the introduction of genomics in the dairy industry
- AHDB won £342,000 from Innovate UK which will be used to genotype 10,000 cows from TB breakdown herds. They will also genotype 2,000 bulls with high TB advantage reliability but not yet genotyped
- Beef TB Advantage scheme – two year project funded by AHDB beef and lamb which started in Jan 2018 (more challenging than dairy)
- International sharing of data for genetic evaluations from Ireland is being pursued
- Project application for research to calculate infectivity from existing phenotypes
- Research application April 2018 submitted for machine learning prediction of TB status from milk mid-infrared spectral data

Genetic selection for cattle that are more resistant to bTB infection can assist in bTB control. The aim of this study was to conduct a quantitative genetic analysis including
genotyping 10,000 cows in the TB area and extending the process into beef cattle. Combined data from various sources is used and is well received by Industry.

Members commented on the presentation. The chair summed up the topic with a comment that TB Advantage is an avenue that need to be pursued for the long term goal of TB eradication, however there were challenges that need to be addressed.

**Biosecure Finishing Units with grazing**

Two NFU colleagues together with a supermarket representative and an AFU operator, presented a paper on the NFUs revised proposal to replace AFUs with grazing with Biosecure Finishing units (BFUs).

The proposal was considered by the group who had questions and queries on how the scheme would work in practice.

In summary it was noted that there was strong commitment to support the cattle sector however a lot of work still needs to be done on this particular proposal.

**Update on Bovine TB R&D Programme Priorities**

Update on Bovine TB R&D Programme was given.

**Proposal to make increased use of para-veterinary professionals as TB testers**

APHA colleague shared their paper setting out a proposal to consult on making increased use of non-veterinary TB testers.

Lay testers have been used in the UK since 2015 but only to a limited extent in APHA Offices. Now APHA propose to allow Veterinary delivery partners (VDP) to engage fully trained and accredited non-vets to carry out TB tests. As is currently the case, the results of the tests carried out by lay testers would have to be interpreted by a vet.

Key potential benefits would be to help practices increase their capacity to deliver planned increases in TB testing for example 6 monthly surveillance testing in the HRA. It would also provide contingency for the potentially reduction in number of vets in the UK following Brexit and potentially reduce the cost of some pre and post movement tests for industry.

Feedback from members was encouraging. Current VDPs have explicitly asked for the wider use of non-vet testers to be considered. The BVA confirmed in 2013 that in their view there is a role to play for lay TB testers as part of a veterinary team.
**Risk Based trading – developing new policy options for discussion and input**

TB Programme colleague presented slides on the full set of options Defra are considering for risk based trading. These range from continuing with voluntary and attitude focused approaches to incentivised options and mandatory interventions.

The scoping is at an early stage of development. Discussion is needed with stakeholders and an assessment made of the potential impact on trade and the practicalities of implementation. There are many risk factors to consider. The breakdown history, recent breakdown, recent purchases, CHeCs, Risk area, Pre-movement test all of which are included in options scoping. There are other risk factors like biosecurity measures, persistent breakdown and undisclosed infection which are not included in options scoping. A member suggested that herd size should also be taken into account. Those on the HRA are tested annually while those in the LRA are tested every four years and this is also a risk. Having a joined up approach was encouraged.

**APHA RVL South East update for 2-17 TB Epidemiology**

APHA colleague gave an update for the South East. The presentation focused on the TB picture for the South east during 2017. It showed significant increases in incidence in two counties, in particular, a two-fold rise in Berkshire and almost three times in Buckinghamshire compared to a doubling in Oxfordshire in 2016 which has been sustained at the same level in 2017. The breakdowns in the South East increased from 133 in 2016 to 163 breakdowns in 2017. There is a new TB eradication board for Berkshire, Buckinghamshire and Oxfordshire and the first meeting was held in March 2018.

**Improving Links between Defra, TBEAG and local TB Eradication Groups**

The Secretariat ran through the proposals to develop a more structured working relationship between Defra, TBEAG and the local tb eradication groups.

The proposals being put forward for agreement following internal consideration are:

- Secretariat to circulate TBEAG minutes to TBEG chairs following each meeting. This will be the version of the minutes that are produced for Gov.UK.
- TBEAG secretariat to provide suitable materials to TBEG chairs to help them disseminate messages. For example the gamma testing power point slide pack and TB Advisory Service leaflet.
- Liaise with APHA to ensure that a local APHA representative is able to attend TBEG meetings and is suitably briefed. (Policy leads to attend TBEG meetings only if required, for example to discuss a particular policy issue or consultation)
• Secretariat to provide a list of useful contacts to TBEG chairs. For example, guest
speakers from TBEAG who would be willing to present to TBEGs.

• TBEGs asked to share their local agendas with TBEAG secretariat so that we can
keep TBEAG informed of local issues and potentially request TBEAG members or
policy officials to attend if necessary.

• TBEAG secretariat to arrange an annual meeting between TBEG chairs, TBEAG
chair, TBEAG members and TB policy officials. This would build greater trust
between TBEAG, TBEGs, and the Defra policy team and would facilitate the
sharing of news and local intelligence, help officials gain a greater understanding of
how industry functions and the potential impacts on businesses of existing and
proposed new policies.

**Action: TBEAG April 049:** Secretariat to take forward the above recommended
actions for better linkage with TBEAG/TBEG relationship.

**AOB**

A TBEAG member mentioned that the Review Panel wanted to engage and consult
TBEAG. Question was asked of the member on how we are going to feed into the review
and it was agreed that this would be an agenda item for the June meeting.

**Action: TBEAG April 049** Secretariat to add TB Strategy review on the agenda for the
next meeting.

Next meeting is on the 20 June 2018.