Cattle Health Certification Standards (CHeCS)

Bovine Tuberculosis (bTB) Herd Status Accreditation Programme

Technical Standard

October 2016

Contents

1. About Bovine Tuberculosis (bTB)

Bovine Tuberculosis is a contagious chronic, progressive, wasting condition that affects cattle and other animals. It is caused by the bacterium *Mycobacterium bovis*.

M. bovis is shed in bodily secretions, especially respiratory secretions. It can be carried by a number of species but the main wildlife reservoir in the UK is the badger.

M. bovis is infectious to humans and caused a high number of deaths in the UK prior to the introduction of pasteurisation of milk and meat inspection procedures.

Tests carried out on livestock by either skin test or blood sampling are very valuable in diagnosing and managing bTB. They are not, however, 100% accurate, especially with respect to sensitivity. This means that infected animals may test negative. Testing individual animals prior to sale may therefore give a false result and cannot be absolutely relied upon.

However, the tests are very good at detecting herd infection. If a herd repeatedly tests negative for the disease the herd can be categorised as likely to be free of bTB.

Research has shown that a herd has to have tested clear for 10 years to provide the highest level of confidence that latent (hidden) infection is not present.

Because of the difficulties with testing and the organism being maintained within a wildlife reservoir, eradication is more difficult compared to some of the other diseases in the cattle health schemes. Herds in parts of the country where *M. bovis* infection is endemic in wildlife may be exposed to a higher background level of 'environmental' infection compared with herds in non-endemic bTB areas where risk arises primarily from cattle movements.

A simple test and cull programme is not sufficient to maintain freedom from infection. This must be supplemented by measures to ensure that stock with undisclosed infection are not introduced into herds and implementing measures to limit contact with infected wildlife, particularly badgers.

Vaccination programmes for both badgers and cattle may have a role to play in disease control. There is a licensed vaccine for use in badgers ('Badger BCG'; Veterinary Laboratories Agency, UK) but administration requires the cage trapping and vaccination of badgers by licensed individuals. At the time of writing there is no licensed cattle vaccine. BCG-based vaccines do not provide complete protection against infection.

Please see www.tbhub.co.uk for more information about bTB.

2. The CHeCS bTB Herd Status Accreditation Programme

2.1 Objective

To provide a system of assessment of herds graded according to risk with respect to bTB, which enables herds to reduce their disease risk and facilitates trade between herds in a way that minimises disease spread.

2.2 Method

Working with a CHeCS-accredited Health Scheme (list available from www.checs.co.uk), herds may progress from 0 to 10, depending on preventative measures taken and progress made in controlling bTB. In addition to adhering to the CHeCS rules, there are mandatory requirements that support the control and prevention of bTB within this programme (detailed in following sections).

To move up through the scores within the programme, herds must be operating with a CHeCS-accredited Health Scheme and be deemed to be adhering to CHeCS standards. However, it is recognised that herds may choose to test animals and conduct some form of independent risk assessment outside of the mandatory requirements of this Programme. These herds will remain 'unclassified' and will be considered to be of unknown risk of being a source of bTB-infected stock for the purposes of this programme.

The Accreditation programme covers both beef and dairy herds.

3. Definition of scores within the CHeCS bTB Herd Status Accreditation programme

Statutory routine surveillance testing is completed at intervals set according to the national bTB disease control programme (see links at end of document) and may be subject to changes according to regional or local disease prevalence and incidence.
Accreditation scores for herds in the scheme is set according to the number of years that the herd has been Officially TB Free, up to 10 years, as seen in the examples below.

3.1 Score 10

- The herd is Officially TB-Free (OTF) and there has not been a bTB breakdown within the herd for at least 10 years.
- Any required statutory herd tests have been completed in accordance with the required testing regime for this herd (in some cases this could be none).
- The herd is operating within a CHeCS-accredited health scheme and is deemed to be adhering to CHeCS standards.

3.2 Score 9

- The herd is OTF and there has not been a bTB breakdown within the herd for at least nine years.
- All statutory herd tests have been completed in accordance with the required testing regime for this herd.
- The herd is operating within a CHeCS-accredited Health Scheme and is deemed to be adhering to CHeCS standards.

3.3 Score 8

- The herd is OTF and there has not been a bTB breakdown within the herd for at least eight years.
- All statutory herd tests have been completed in accordance with the required testing regime for this herd.
- The herd is operating within a CHeCS-accredited Health Scheme and is deemed to be adhering to CHeCS standards.

There will be a score corresponding to each number of years since the herd regained OTF status after a breakdown (see additional notes) down to:

3.4 Score 0

- The herd must be OTF.
- There has been a bTB breakdown within the herd in the past year
- All statutory herd tests have been completed in accordance with the required testing regime for this herd.
- The herd is operating within a CHeCS-accredited Health Scheme and is deemed to be adhering to CHeCS standards.

3.5 Additional notes

- All statuses require a health plan covering the control of bTB in place and quarantine facilities as a general requirement of CHeCS standards.
- A bTB breakdown within the herd is deemed to have occurred when a test positive animal has been disclosed at any private or statutory TB test conducted on the herd, or a culture positive slaughterhouse case has been found in an animal originating from the herd. Disclosure of a test positive animal that is in quarantine, or a culture positive slaughterhouse case has been found in an animal originating from quarantine does not constitute a bTB breakdown under CHeCS rules.
- All cattle herds are classed as Officially TB Free (OTF) if their bTB tests are up-to-date and there is no suspicion of bTB infection. To calculate the number of years since the last bTB breakdown (if applicable), the date that TB2 restrictions were lifted at the end of the last bTB breakdown (TB10 issue date) is used.

4. Essential points of the CHeCS bTB Herd Status Accreditation programme

These instructions are mandatory for herds participating in the CHeCS bTB Herd Status Accreditation programme. Guidance on biosecurity for bTB control can be found at www.tbhub.co.uk/biosecurity. Herd owners, managers and Veterinary Surgeons participating in a cattle health scheme must be familiar with this advice and should seek to achieve the standards set.

4.1 Testing

All appropriate animals must be presented for testing when requested and the facilities for testing must be such that the test can be accurately and safely completed. All animals must be identifiable by their ear tags or by electronic ID.

4.2 Test-positive animal

Any animal that tests positive for bTB by the single intradermal comparative cervical tuberculin (SICCT) test, bTB gamma interferon test, or has bTB lesions at post mortem or a positive *M. bovis* culture is a positive animal. Any animal that tests positive or inconclusive for bTB must be placed in isolation and retained there until culled or, in the case of an inconclusive reactor, re-tested clear. Milk from these animals must not be fed to calves. If a test-positive animal is identified in a herd through statutory or private testing, the herd will immediately lose its Herd Status Accreditation and only regain 4 once no longer under restriction. The same applies if a test-positive animal is identified in a herd through post-movement testing – unless it is confirmed that CHeCS standards (biosecurity and quarantine measures) have been sufficiently observed to allow the herd to retain its original Herd Status once no longer under restriction.

4.3 Added Animals

These animals always constitute a risk of introducing infection into the herd. **Unless an animal to be introduced into the herd has resided since birth in a low-incidence area** (the four-yearly testing area in England, or in Scotland), it must be subjected to a pre-movement skin test at the holding of origin within 60 days of the proposed introduction.

Post-movement skin testing of added animals is compulsory for members of the CHeCS bTB Herd Status Accreditation programme **unless the animals have resided since birth in a CHeCS Status 10 herd where there is no statutory requirement to pre-movement test**. The post movement test will be conducted between 60 and 120 days after arrival.

Pre- and post-movement testing is carried out at the cost of the keeper, unless the period happens to coincide with a statutory test.

On entry to the herd it is recommended that all added animals are placed in quarantine and the general CHeCS rules above on isolation and testing apply. Observing these rules means that in the case of a test-positive, the animal will not affect the herd CHeCS Herd Status once the herd is no longer under restriction.

It is not compulsory for the added animals to be kept in quarantine until the post-movement skin test has been conducted. However, if the added animal then fails the bTB test outside of quarantine, the herd will be deemed to have suffered a breakdown and the herd will drop to CHeCS Herd Status 0 once no longer under restriction.

All post-movement testing must be conducted by the veterinary practice responsible for monitoring the CHeCS standards on the farm. The veterinary surgeon concerned can then certify that the animal has been in quarantine and CHeCS standards are being observed.

In England, if desired, it may be possible with permission from APHA for the added animals to be tested using the gamma interferon test (as a private test, paid for by the keeper) whilst in quarantine. The post-movement skin test would still be required for animals that were subjected to pre-movement testing, but a negative gamma interferon test would give the keeper additional reassurance to facilitate earlier introduction of those animals into the herd without risking his/her CHeCS bTB Herd Status.

4.4 Selling animals that have been purchased from another herd

CHeCS Accreditation scores only apply to homebred animals and cannot be used when selling other animals. Hence CHeCS bTB Herd Status Accreditation can only be used for the first sale; after that, the animal must be sold as 'no status'.

4.5 Shows, Sales etc.

Animals attending shows and sales will run the risk of contracting bTB even when all animals attending the show or sale have been pre-movement tested. Certain agricultural shows have been assessed as low risk by APHA and therefore are deemed to be exempt from the pre-movement testing requirement – in these cases, CHeCS will follow the statutory requirements for pre-and post-movement testing, as can be found on www.tbhub.co.uk. Animals returning to the herd from shows and sales that have not been deemed to be exempt from pre-movement testing by APHA shall be regarded as being the same as added animals that required pre-movement testing and, as such, will require post-movement testing between 60 to 120 days after the last show. If the animal owner wishes to safeguard his/her herd's CHeCS bTB Herd Status, animals returning to the herd should be kept in isolation until they are tested (see 4.3)

4.6 Accreditation of herd for scores 0 to 10

The date the herd first achieved a particular status will be included on the Certificate of Accreditation.

Should a herd, having reached a particular status, fail to meet the standard and lose its status, but subsequently regain the original status, the date on the certificate will be when that status was regained.

If an added animal tests positive whilst in quarantine the whole of the holding is subject to restriction in line with statutory requirements. CHeCS bTb Herd Status is suspended until a TB10 is issued to lift herd restrictions. If during the consequent tests no test-positive animals are found outside of quarantine, the herd will be restored to its previous CHeCS Herd Status. This will require certification by both the keeper and their veterinary surgeon that the test-positive animals were only found in the quarantine facility and that quarantine was maintained.

If the quarantine facility is on a separate holding (i.e. has a separate CPHH) then the main holding will be unaffected by the statutory restrictions and its CHeCS bTB Herd Status will be maintained. APHA may however require that the whole herd undergoes a check test after veterinary risk assessment. If a suspected slaughterhouse case is found the CHeCS bTB Herd Status shall be suspended until that case is confirmed to be negative by culture.

4.7 Definition of a clear test

In accordance with statutory testing, for a herd test to be clear all animals eligible to be tested must be test-negative. Any animal with an inconclusive result must have further testing carried out with negative results to demonstrate it is not a test positive animal. Until all animals have achieved a negative result the CHeCS bTb Herd Status must be decreed as unknown.

4.8 Offspring of female test-positive animals

Any calf under twelve months old that has been reared by a cow recognised as a test-positive must be subjected to a skin test after a suitable interval if this has not already taken place as part of the herd test. To maintain the CHeCS bTB Herd Status, the calf should be kept in isolation until it has tested clear. The clear test must be at least 60 days after weaning.

4.9 Health Plan

A health plan covering the control of bTB must be in place as part of the requirements for the CHeCS bTB Herd Status Accreditation programme. It must be updated annually and signed off by both the herd's veterinary surgeon and by the herd owner or manager. The health plan must be available to the health scheme provider on request. The health plan must cover the mandatory control elements listed in the guidelines. The herd's veterinary surgeon must detail in writing within the health plan why any particular guideline has not been followed.

4.10 Grazing of cattle

In a High Risk or Edge area, cattle must not be grazed on pasture previously grazed by non-accredited cattle until a period of two months has elapsed. The same grazing restrictions apply to accredited cattle if slurry or manure collected from non-accredited cattle has been used on the pasture.

4.11 Farm boundaries

Farm boundaries must prevent cattle from straying off or onto the farm and must prevent nose to nose contact with cattle of a lower health status over fences or walls. Installation of double fencing, or use of an equivalent boundary to provide a gap of 3 metres between scheme cattle and any neighbouring cattle of a lower or unknown health status, is essential where farms are in a High Risk or Edge area. It is a useful standard to adopt for all areas.

4.12 Failure to adhere to mandatory requirements

Should a herd fail to adhere to any of the control elements then it will immediately lose its CHeCS bTB Herd Status Accreditation. Furthermore, failure to provide a current and signed-off health plan within one week of it being requested by the health scheme provider will result in the immediate suspension of their CHeCS bTB Herd Status Accreditation.

4.13 Re-accreditation

Herds that have lost their status as outlined in 4.12 can only regain their previous status following all mandatory requirements being satisfied and after the next herd test.

5. Additional recommendations for CHeCS bTB Herd Status Accreditation programme health plans

These are not mandatory under the CHeCS Accreditation programme, but are highly recommended to reduce the risk of a bTB breakdown.

5.1 Water provision at grass

Wherever possible, mains water should be provided and water troughs regularly cleaned.

5.2 Natural water sources

Ponds and other areas where wildlife may drink should be fenced off. Extensive grazing is exempt from this requirement.

5.3 Co-grazing with other ruminant species

Other ruminants can be a source of infection for cattle and should not co-graze with cattle. This applies to all but extensive grazings.

5.4 Feeding practices

Where possible, avoid high stocking densities and over-grazing. Intensive grazing encourages cattle to graze margins of fields where there is more risk of infection. Where possible avoid feeding concentrates on the ground and try not to over feed supplementary food. Feed troughs should be raised 75 centimetres off the ground, kept clean and free of contaminants. Mineral licks should be 75 centimetres off the ground on stands with vertical sides to prevent badger access.

5.5 Isolation facility

An isolation facility that prevents contact with other stock is advised for all added animals. A dedicated building separate from other cattle buildings is ideal but a separate paddock that prevents contact with other stock may suffice. No air space, drainage or manure storage may be shared with other cattle. Manure may only be removed from the dedicated storage area to be spread on land or added to the main manure store when all animals in the isolation facility have passed the required health tests and been added to the herd. If any of the animals in the isolation facility suffer a breakdown, manure from the isolation facility must not be used in recycled bedding or be disposed of onto pasture that is to be grazed by cattle within two months. Where paddocks have been used to isolate test positive animals, or to quarantine disease breakdown cattle, other cattle must not be allowed to graze them for at least two months.

5.6 Cattle housing and feed stores

Badger visits to farm buildings can be frequent. A range of simple measures which block gaps and use sheer sides with no footholds can help stop badgers entering buildings.

- Feed store walls and doors should be secure and doors kept closed (especially at night).
- Sides of the building should not be open but of a smooth and solid construction and greater than 1.5 metres high.
- Doors should be of a smooth and solid construction and a minimum of 1.5 metres high (solid sheets of metal can be added to a 5 bar gate).

- Gaps at the sides of and under doors and walls should be no greater than 7.5 centimetres and must not be able to be enlarged by digging or chewing.
- Silage clamps should be well covered and the face protected by an electric fence when not in use.
- Exclusion measures must be used every night and kept in a good state of repair.
- Where appropriate, electric fencing can be used at the farm boundary to ensure access by wildlife is denied (best practice is to include feed stores and silage faces etc.) Strands of wire should be at 10, 15, 20 and 30 centimetres above the ground.
- If you cannot stop wildlife visits to feed stores, store feed in metal, lidded feed bins.

5.7 Locations of badger activity

Where possible, restrict cattle access to badger runs, latrines and setts. Avoid cattle accessing woodland.

5.8 Slurry and muck

Do not share slurry/dung spreaders. Do not spread slurry from another farm onto your land. If possible store slurry for six months before it is spread and spread it on arable land.

5.9 Transport

Do not share livestock vehicles and trailers.

5.10 Badger carcasses

Dispose of badger carcasses carefully. In Wales badgers found dead can be collected for post mortem examination. If you come across a dead badger please note the location and call the Animal and Plant Health Agency (APHA) on 0300 303 8268.

6. Links to National bTB control programmes

Great Britain: http://www.tbhub.co.uk/

England: https://www.gov.uk/government/policies/bovine-tuberculosis-bovine-tb

Wales: www.wales.gov.uk/bovinetb

Scotland: http://www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/Diseases/disease/tuberculosis