

Research and Information Service Briefing Note

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Overview of Bovine TB free status in Scotland

1 Background

Scotland achieved Officially Tuberculosis Free Status (OTF) in September 2009 and remains the only part of the UK to achieve and maintain this status.

For a Member State or region to achieve OTF status as defined in Council Directive 64/432/EEC, at least 99.9 percent of the herds within it must have been or remained OTF for at least six consecutive years. OTF status allows for residual levels of the infection to remain, whereby less than 0.1 percent of herds experience the infection annually in a region defined as OTF, whilst eradication would represent elimination of the infection¹

Bovine TB herd incidence data for the UK and Ireland highlights the fact that Scotland has significantly lower levels of Bovine TB than any other part of these islands.

¹ <u>The Strategy for achieving Officially Bovine Tuberculosis Free status for England, Defra, April 2014</u>

Administrative area	Bovine TB herd incidence 2013
England	5.20% ³
Republic of Ireland	3.88%4
Northern Ireland	6.44%5
Scotland	0.07%6
Wales	3.52%7

Table 1: Bovine TB herd incidence data for 2013²

2 Historic Incidence of Bovine TB in Scotland

There is an absence of any in depth historical analysis of Bovine TB distribution across the UK but a recent paper by Atkins and Robinson⁸ suggests that there have been changes in the spatial patterning of Bovine Tuberculosis.

Figure 1 below maps the results of tuberculin testing in 1938 by government vets and reveals Central and North East Scotland were amongst the main hotspots in terms of reactors per 1000 cattle tested.

² GB herd incidence is calculated only taking account of OTFW whilst in Northern Ireland herd incidence takes account of OTFW and OTFS data – making comparison difficult. As a result, and in an effort to make this as comparable as possible the GB herd incidence data in this table has been calculated by calculating OTFW data as a percentage of the number of herds registered on SAM

³ Monthly statistics on the incidence of tuberculosis (TB) in cattle in Great Britain, regional dataset, Defra

⁴Annual TB Statistics, Department of Agriculture, Food and the Marine, 2013

⁵ <u>TB disease Statistics, July 2014, DARD</u>

⁶ Monthly statistics on the incidence of tuberculosis (TB) in cattle in Great Britain, regional dataset, Defra

⁷ Ibid

⁸ <u>Atkins, P.J. and Robinson, P.A. (2013) Bovine tuberculosis and badgers in Britain: relevance of the past, Epidemiology and Infection doi:10.1017/S095026881200297X</u>

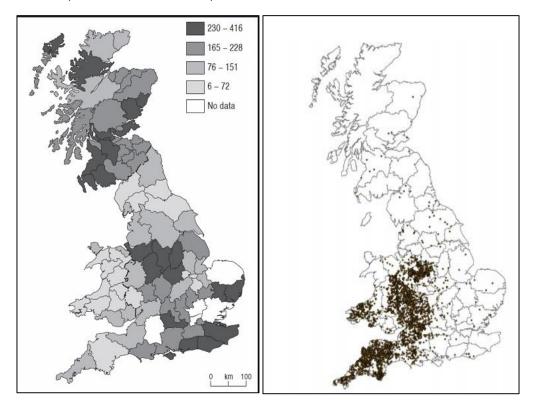


Figure 1: Reactors per 1000 cattle tested, 1938, quartiles⁹

Figure 2: Confirmed cattle breakdowns for 2010¹⁰

In comparison to the situation in 1938, figure 2 highlights confirmed cattle breakdowns for 2010 and reveals that the Scottish 'hotspots' identified in 1938 are no longer present, whilst South West England has a large concentration of cattle breakdowns.

Atkins and Robinson postulate that these changes may relate to factors such as farming practice (rising herd sizes, and cattle densities, increased cattle movements), badger group sizes and the possibility that Bovine TB in badgers may be a spillover rather than endemic disease and therefore does not persist over lengthy periods, but the available data does not support robust conclusions.

3 Maintaining Officially Tuberculosis Free Status in Scotland

Following the granting of OTF in September 2009, the emphasis within Scotland has been on maintaining this status and table 2 below identifies some of the main mechanisms employed and how these compare to what is currently used within Northern Ireland.

Mechanism	Scotland	Northern Ireland
herd testing	Routine Testing interval of 48 months – can be more often for certain herds in certain circumstances	Mandatory Annual testing of all herds Herds may also undergo increased frequency of testing. This is in accordance with CD 64/432 EEC where a herd is suspected of

	 Since 2012 some herds identified as low risk and thereby exempt from routine testing. Low risk herd criteria requires compliance with 1 of the following: herds with fewer than 20 cattle which have had fewer than 2 consignments of cattle moved on from high incidence TB areas (including Northern Ireland and the Republic of Ireland) in the previous 4 years herds that slaughter* more than 25% of their stock annually and have had fewer than 2 consignments of cattle moved on from high incidence TB areas (including Northern Ireland and the Republic of Ireland) in the previous 4 years herds that slaughter* more than 25% of their stock annually and have had fewer than 2 consignments of cattle moved on from high incidence TB areas (including Northern Ireland and the Republic of Ireland) in the previous 4 years 	being diseased or had disease confirmed. In addition, herds may be subject to increased testing frequency where epidemiological investigations disclose an increased disease risk, such as tracing or contiguity
movement controls	The Cattle Tracing System (CTS) records all movements of cattle registered or imported into Great Britain since 28 September 1998. It is a legislative requirement that all cattle movements both "on" and "off" a holding and between herds are notified to the British Cattle Movement Service (BCMS) within 3 days	All calves born after 1 January 1998 must be identified with an ear tag in each ear within 20 days from the birth of the animal. All cattle identification numbers are authorised by DARD and recorded on the Animal and Public Health Information System (APHIS) computer database so that no duplication should be possible.
	 Pre movement testing Cattle coming to Scotland from a High Incidence Area (HIA) within England or Wales ie subject to annual routine herd testing - require a clear pre-movement test within 60 days prior to movement Exemptions to the requirement for a pre- movement test are as follows: cattle being sent to Scotland directly for slaughter cattle moving to shows/exhibitions and returning directly to their farm of origin calves under six weeks of age at the time of the move If the required pre-movement test has not been carried out before the animal arrives in Scotland, the test will be regarded as overdue and movement restrictions will be imposed on the receiving Scottish herd until the test has 	Movement control from all herds, at all times, is controlled by a combination of the OT herd status and status reason applicable to the herd. As all movements must be recorded on APHIS, including those to market and abattoir, immediate movement control is applied. Since the year 2000 the implementation of movement control documents require a producer to notify the Department within 7 days of an animals either leaving or arriving on his/her farm. Markets are required to notify movements on and off to the Department by the end of the next working day. However, in the case of a restricted animal the producer is required to obtain a movement licence from the Department in advance of moving the animal out of his/her herd. All movements are recorded and can be traced on APHIS.
	been carried out. A second (post-movement) test, will then be required for these cattle no	OTW(withdrawn) status applied are both subject to movement restrictions

fewer than 60 days and no more than 120 days after the first test.	immediately. This is controlled through APHIS.
 Cattle coming to Scotland from a Low Incidence Area (LIA) within England or Wales is subject to 4 yearly routine herd testing - require a clear pre-movement test within 60 days prior to movement Exemptions to the requirement for a pre-movement test in a LIA are as follows: cattle which can be shown to have spent their whole lives in LIAs cattle being sent to Scotland direct for slaughter cattle moving to shows/exhibitions and returning directly to their farm of origin catves less than six weeks old at the time of the move If the required pre-movement test has not been carried out before the animal arrives in Scotland, the test will be regarded as overdue and herd movement restrictions will be imposed on the receiving Scottish herd until the test has been carried out. Post-movement tests are required for cattle moving to Scotland from a HIA in England or Wales no fewer than 60 days and no more than 120 days after their arrival in Scotland. This Requirement also applies to cattle imported from Northern Ireland whilst cattle imported from the Republic of Ireland are restricted at their first destination pending a clear 60 day post import test. If the required post-movement test has not been carried out by 120 days of arrival in Scotland, the test will be regarded as overdue and herd movement restrictions will be imposed on the receiving Scottish herd until such time as the test has been carried out.	 Where a non breakdown herd test becomes overdue, increasingly stringent movement controls are applied routinely as below: Immediately overdue, no live moves to market, export, or other holdings. I month overdue, no live moves to market, export, other holdings or slaughter. No moves in are allowed except one breeding bull on exceptional licence. All animals over 42 days are subject to the single intradermal test and interpretation within 30 days of export. Cattle imported into Northern Ireland for breeding/production purposes must have a supplementary certificate signed by a Private Veterinary Practitioner certifying that the animals have been subjected to a Tuberculosis test within 30 days prior to export, with negative results. Cattle imported into Northern Ireland for slaughter must be from a herd which d is officially Tuberculosis and Brucellosis free and immediately after landing, the imported animals must be moved direct to slaughter and may only be consigned to the abattoir as shown on the health certificate. The animals must not be moved to a market.