



Date 29 November 2018

Tuberculosis (TB) in Cattle: Pre-movement and Post-movement Testing in Great Britain, 2006 to June 2018

This notice contains statistics on statutory pre- and post- movement TB testing that is carried out to reduce the risk of spreading TB through movements of infected cattle. Unlike the majority of TB tests, the pre- and post-movement tests reported on in this notice were arranged and paid for by herd owners.

Key points in this quarterly release April to June 2018:

- Pre-movement TB testing in England led to the identification of 93 reactors out of 138,632 tests completed in individual animals.
- Pre-movement testing in Wales led to the identification of 28 reactors out of 40,249 tests completed in individual animals.
- Post-movement testing in the Low Risk Area (LRA) of England identified 4 reactors out of 14,242 tests completed in individual animals, bringing the total since the policy was introduced in April 2016 to 47 reactors.
- There were 266 post-movement tests in Scotland of animals that had arrived from annual and six-monthly testing areas in England and Wales. These tests identified no reactors.
- Post-movement testing in some parts of Wales was introduced in October 2017, no reactors have been identified.

The different TB movement testing regimes in England, Scotland and Wales reflect regional variations in disease incidence, including the Officially TB Free status of Scotland. For background see:

<https://www.gov.uk/government/publications/pre-movement-and-post-movement-tb-testing-of-cattle-in-great-britain>

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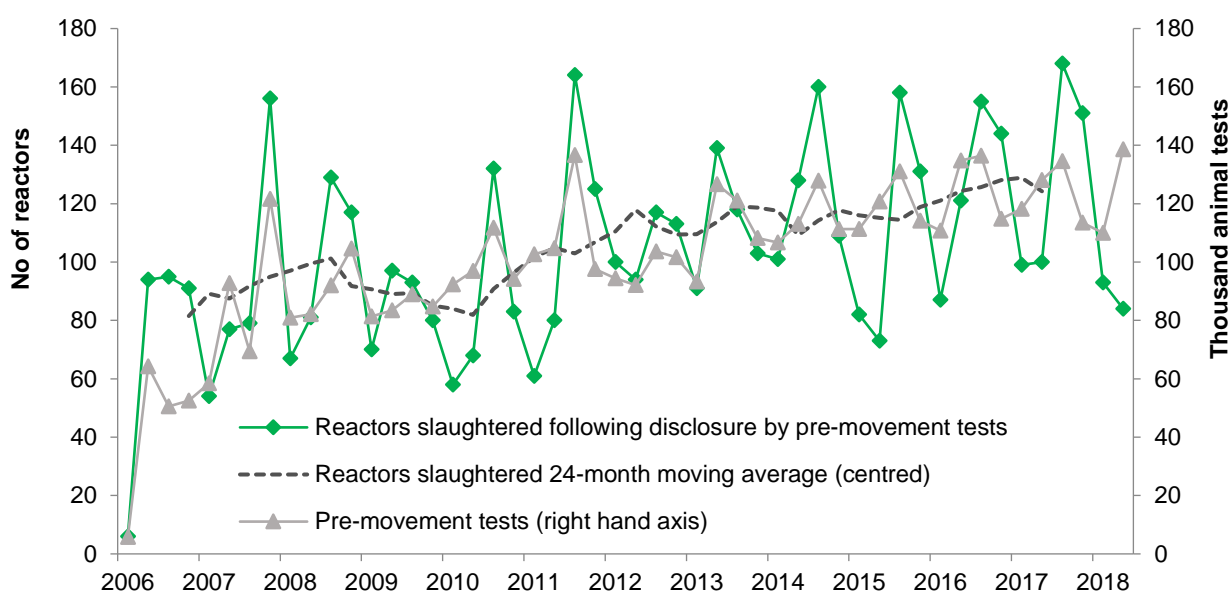
The movement of cattle with undetected TB infection is believed to be the most common way in which this disease spreads to new areas. In particular, movements of cattle from high bovine TB incidence areas of GB pose a substantial risk of introducing the infection to the lower incidence areas of England and Wales and to Scotland, which has been

officially free of TB since September 2009. Such movements account for more than half of all new TB herd breakdowns with lesion- or culture-positive animals identified in the LRA each year and about one third of such breakdowns in the Edge Area ¹.

England Pre-movement TB Testing

Compulsory pre-movement testing of cattle was introduced in England in March 2006, initially for animals over 15 months of age. The minimum qualifying age was lowered to 42 days the following year. Legislative changes implemented since 2012 have progressively led to the abolition of the majority of pre-movement testing exemptions that were permitted under the original TB legislation. Nowadays, all cattle aged 42 days and over moving out of annually (or more frequently) tested herds must have a skin test with negative results within 60 days before movement, with few exceptions such as cattle moving directly to slaughter, to an approved finishing unit (AFU) or to a slaughter market.

Figure 1 Reactors slaughtered by quarter in England following disclosure by pre-movement tests, since the rollout of the policy in March 2006



Note: reactors slaughtered timeline excludes inconclusive reactors that became reactors at retest.

Table 1 England pre-movement TB tests quarterly

	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018
All movements	1,163,201	1,220,864	1,140,899	1,243,639
Pre-movement animal tests carried out	134,513	113,480	109,969	138,632
Reactors disclosed by pre-movement tests	168	151	93	84
Reactors disclosed by pre-movement tests including IRs that became reactors at retest	177	173	105	93
Herds in which reactors were found by pre-movement tests	86	72	49	55

¹ Source: Bovine tuberculosis in England in 2016: Epidemiological analysis of the 2016 data and historical trends. Figure 4.2.7 Hazard and risk pathway attributed in incidents that were resolved in 2016. APHA, September 2017.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/643616/tb-epidemiology-england-2016.pdf

Table 2 England pre-movement TB tests annually, 2014 to 2017

	2014	2015	2016	2017
All movements	4,510,336	4,547,593	4,635,166	4,738,133
Pre-movement animal tests carried out	458,778	477,236	496,698	494,259
Reactors disclosed by pre-movement tests	498	444	507	518
Reactors disclosed by pre-movement tests including IRs that became reactors at retest	548	484	555	565
Herds in which reactors were found by pre-movement tests	273	271	271	282

Annual numbers of pre-movement tests (PRMT) in England increased by 8% between 2014 and 2016, with a slight drop in 2017. This followed the expansion of the areas under annual routine testing and the division of England on 1 January 2013 into a Low Risk Area (on background four-yearly herd testing) and High Risk and Edge Areas (where cattle herds were placed on annual or six-monthly surveillance testing).

Since 2013 the number of herds in England that have had reactors disclosed by pre-movement testing has remained fairly constant as an annual total. Figure 1 shows the seasonal fluctuation in reactors slaughtered with peaks generally in the July to September quarter. This is most likely due the PRMT undertaken prior to the October moves and sales, when animals have been grazing outdoors during spring and summer.

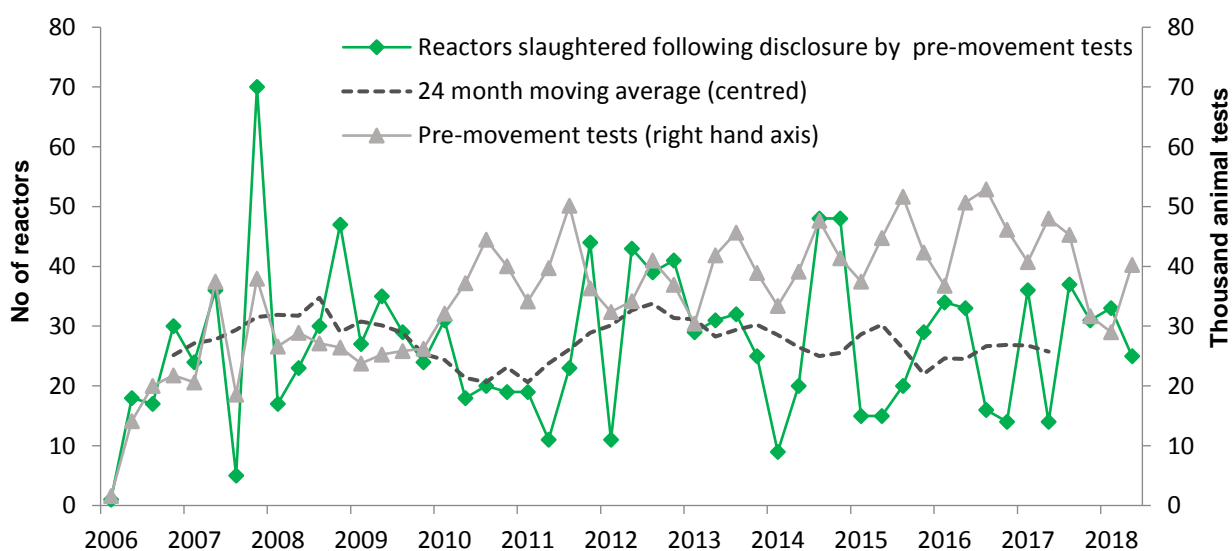
The underlying statistical dataset from 2006 (Table A: England Pre-movement tests) is available to download at:

<https://www.gov.uk/government/statistics/latest-official-statistics-on-pre-movement-and-post-movement-testing-for-tuberculosis-tb-in-cattle-in-great-britain-quarterly>

Wales Pre-movement TB Testing

The policy was introduced Wales May 2006, with some changes to exemptions since 2010. All cattle aged 42 days and over moving out of an annually or more frequently tested herd must have tested negative to a TB test within 60 days before movement - unless the herd or type of movement is exempt.

Figure 2 Reactors slaughtered by quarter in Wales following disclosure by pre-movement tests, since the rollout of the policy in March 2006



Note: reactors slaughtered timeline excludes inconclusive reactors that became reactors at retest.

Table 3 Wales pre-movement TB tests quarterly

	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018
All movements	214,358	246,563	202,099	239,873
Pre-movement animal tests carried out	45,312	31,707	29,000	40,249
Reactors disclosed by pre-movement tests	37	31	33	25
Reactors disclosed by pre-movement tests including IRs that became reactors at retest	40	36	35	28
Herds in which reactors were found by pre-movement tests	19	13	8	13

Table 4 Wales pre-movement TB tests annually, 2014-2017

	2014	2015	2016	2017
All movements	810,721	828,754	872,081	894,234
Pre-movement animal tests carried out	161,488	176,217	186,538	165,786
Reactors disclosed by pre-movement tests	125	79	97	118
Reactors disclosed by pre-movement tests including IRs that became reactors at retest	141	103	117	134
Herds in which reactors were found by pre-movement tests	56	46	52	58

Annual numbers of (PRMT) in Wales in 2017 decreased by 11% on the peak in 2016 of 186,538. From 1 October 2017 farmers in the Low TB Area of Wales are not required to pre-movement test cattle (some exceptions apply). There appears to be much more variation in the Wales time series compared to England. However, the 24 month moving average that smooths out the peaks and troughs shows that pre-movement testing is detecting between 20 and 30 reactors a quarter on average.

The underlying statistical dataset from 2006 (Table B: Wales Pre-movement tests) is available to download at: <https://www.gov.uk/government/statistics/latest-official-statistics-on-pre-movement-and-post-movement-testing-for-tuberculosis-tb-in-cattle-in-great-britain-quarterly>

Scotland Post-movement TB Testing

Introduced in 2005, all cattle 42 days old and over in a yearly testing area must be pre-movement tested before they enter any Scottish herd. Having entered a Scottish herd these animals must be post-movement tested within 60-120 days although exemptions apply such as if a routine herd test is scheduled.

The figures shown here relate solely to Scotland's post-movement testing rules. A small number of compliance tests are carried out in Scotland on animals with movements not compliant with England and Wales testing rules before they were moved to Scotland. These tests are not included in the data.

Table 5 Scotland post-movement tests quarterly

	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018
Post-movement tests	441	201	200	266
Reactors disclosed by post-movement tests	0	0	0	0
Reactors disclosed by post-movement tests including IRs that became reactors at retest	0	0	0	0
Herds in which reactors were found by post-movement tests	0	0	0	0

Table 6 Scotland post-movement tests annually, 2014 to 2017

	2014	2015	2016	2017
Post-movement tests	5,482	2,292	1,414	1,218
Reactors disclosed by post-movement tests	1	2	0	0
Reactors disclosed by post-movement tests including IRs that became reactors at retest	1	2	0	0
Herds in which reactors were found by post-movement tests	1	2	0	0

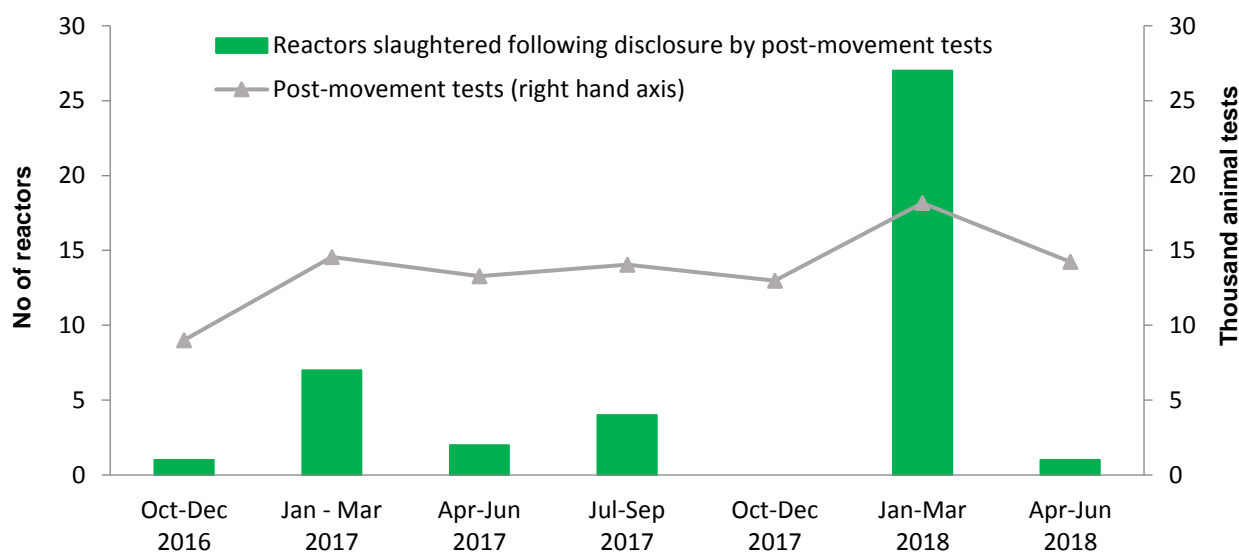
The number of reactors disclosed by these tests is consistently very low. The number of post-movement tests carried out each year in Scotland appears to have dropped substantially in recent years from 5,482 in 2014 to 1,218 in 2017. However in September 2015 there was a change to the way that tests on animals arriving from Northern Ireland were recorded so that they are now captured on a separate code. Data from earlier years is not directly comparable.

The underlying statistical dataset from 2006 (Table C: Scotland post-movement tests) is available to download at: <https://www.gov.uk/government/statistics/latest-official-statistics-on-pre-movement-and-post-movement-testing-for-tuberculosis-tb-in-cattle-in-great-britain-quarterly>

Post-movement TB Testing in the Low Risk Area of England

Introduced on 6 April 2016, post-movement testing is required between 60 and 120 days after animals arrive to the LRA from other parts of England or from Wales. Therefore, the movements may have been undertaken in the previous period e.g. reactors found in Q1 could correspond to testing of animals moved during Q4.

Figure 3 Reactors slaughtered by quarter in England following disclosure by post-movement tests, since the rollout of the policy in April 2016



Note: reactors slaughtered excludes inconclusive reactors that became reactors at retest.

Table 7 Post-movement testing in Low Risk Area of England, quarterly

	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018
Cattle movements on to the LRA from Wales and higher risk areas of England	28,811	30,128	28,421	30,507
LRA post-movement animal tests	14,050	12,983	18,165	14,242
Reactors found by post-movement tests	4	0	27	1
Reactors disclosed by post-movement tests including IRs that became reactors at retest	4	0	27	4
Herds in which reactors were found by post-movement tests	4	0	3	1

Table 8 Post-movement testing in Low Risk Area of England, annually

	2016 (Apr-Dec)	2017
Cattle movements on to the LRA from Wales and higher risk areas of England	77,212	117,875
LRA post-movement animal tests	10,020	54,861
Reactors found by post-movement tests	1	13
Reactors disclosed by post-movement tests including IRs that became reactors at retest	1	15
Herds in which reactors were found by post-movement tests	1	10

The latest quarter identified 4 reactors, the quarterly testing effort has remained relatively consistent since 2017. With the number of reactors disclosed ranging from 0 to 27. The underlying statistical dataset (Table D: England post-movement tests) is available to download at: <https://www.gov.uk/government/statistics/latest-official-statistics-on-pre-movement-and-post-movement-testing-for-tuberculosis-tb-in-cattle-in-great-britain-quarterly>

Post-movement TB Testing in Low TB Area of Wales

From 1 October 2017 farmers in the Low TB Area of Wales need to Post-Movement Test cattle which move from a herd in an Intermediate or High TB area in Wales; or the Edge or High Risk Area of England. In common with the England LRA testing policy, a post movement test is not needed if the animal is tested as part of an annual surveillance test within the 60 to 120 day Post-Movement Test window. Further details of the requirements are at:

<https://gov.wales/topics/environmentcountryside/ahw/disease/bovinetuberculosis/cattlecontrols/Postmovementtesting/?lang=en>

As the test needs to be completed between 60 and 120 days after the movement, January to March 2018 does not represent a full test quarter.

Table 9 Post-movement testing in Low TB Area of Wales, quarterly

	Jan-Mar 2018	Apr-Jun 2018
Cattle movements on to the Low TB Area from higher risk areas of England and Wales	2,994	4,548
Post-movement animal tests	2,028	1,843
Reactors found by post-movement tests	0	0
Reactors disclosed by post-movement tests including IRs that became reactors at retest	0	0
Herds in which reactors were found by post-movement tests	0	0

The underlying statistical dataset (Table E: Wales post-movement tests) is available to download at: <https://www.gov.uk/government/statistics/latest-official-statistics-on-pre-movement-and-post-movement-testing-for-tuberculosis-tb-in-cattle-in-great-britain-quarterly>

Data source and future revisions

These statistics are obtained from the two sources:

- Animal and Plant Health Agency (APHA) work management IT support system (Sam), used for the administration of TB testing in GB,
- The Cattle Tracing System (CTS).

Data can be subject to review back to 2016.

Glossary of terms

AFU	Approved Finishing Units AFUs provide a route for rearing, fattening or finishing cattle from TB restricted and un-restricted farms. AFUs must be approved and licensed by APHA. There are two types: AFUs with grazing (only in certain areas of the High Risk Area of England only) and AFUs without grazing.
EFU	Pre-Movement Testing Exempt Finishing Units EFUs provide a route for beef producers to finish cattle without the need for a pre-movement test. EFUs must be approved and licensed by APHA. These units must meet strict conditions to reduce the potential risk of disease spread from the premises. There are two types: EFUs with grazing and EFUs without grazing. From 1 July 2017 no new units can be approved in Wales. By 1 January 2018 no EFUs will exist in Wales.
LFU	A licensed finishing unit (LFU) is a type of TB unit approved by APHA in the LRA and Low TB Area of Wales. Cattle finished in LFUs will remain under movement restrictions at all times and can only be moved from those units directly to slaughter.
LRA	Low risk area of England.
POSTLRAOV	LRA Post-Movement TB Test
POSTMOVVOV	Wales Low TB Area Post-Movement Test
POSTMTS	Post-movement test (Scotland) This is a post-movement test, paid for by the keeper, to be carried out 60-120 days after arrival to Scotland from England or Wales (exceptions apply). The code was amended in September 2015 to exclude animals arriving from Northern Ireland.
PRMT	Pre-movement test (England, Wales) a pre-movement test carried out 60 days or less prior to movement of an animal(s) from an annually tested herd.
PRMTS	A test paid for by the keeper to be carried out on cattle that have arrived into Scotland that should have had a pre-movement test before departure. Data is not included in these statistics.