

# Tuberculosis (TB) in Cattle: Pre-movement and Post-movement Testing in Great Britain, 2006 to March 2020

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 January to March 2020:

- Pre-movement tests in England led to the identification of 124 reactors, including inconclusive reactors (IRs) that became reactors at retest, out of 120,556 tests completed.
- Pre-movement testing in Wales led to the identification of 7 reactors, including IRs that became reactors at retest, out of 32,307 tests completed.
- Post-movement testing in the Low Risk Area (LRA) of England led to identification of 9 reactors, including IRs that became reactors at retest, out of 13,297 tests completed.
- There were 265 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.
- There were 2,149 post-movement tests in the low TB area of Wales. These tests identified no reactors.

The different <u>TB movement testing regimes</u> in England, Scotland and Wales reflect regional variations in disease incidence, including the Officially TB Free status of Scotland.

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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

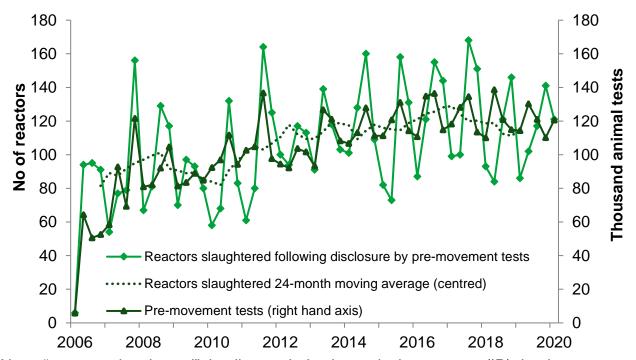
This is an **Official Statistics** publication. These statistics have been produced to the high professional standards set out in the <u>Code of Practice for Official Statistics</u>.

LRA each year and about one third of such breakdowns in the Edge Area. Source: Bovine tuberculosis in England in 2018: Epidemiological analysis of the 2018 data and historical trends. Figure 3.2.10 Summary of the weighted source of infection attributed for all incidents that started in 2018, in the LRA.

## **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 premovement tests, since the rollout of the policy in March 2006



Note: "reactors slaughtered" timeline excludes inconclusive reactors (IR) that became reactors (R) at retest – known as IR to R.

Table 1 England pre-movement TB tests quarterly

Measure	Apr-Jun 2019	Jul-Sep 2019	Oct-Dec 2019	Jan-Mar 2020
All movements	1,235,318	1,091,173	1,200,029	1,131,042
Pre-movement animal tests	130,187	121,005	110,144	120,556
Pre-movement test reactors	102	117	141	121
Total reactors: PRMT and IR to R	111	123	151	124
Herds with reactors	54	59	53	64

Table 2 England pre-movement TB tests annually, 2016 to 2019

Measure	2016	2017	2018	2019
All movements	4,635,166	4,738,884	4,704,690	4,643,159
Pre-movement animal tests	496,698	494,268	484,415	475,644
Pre-movement test reactors	507	518	444	446
Total reactors: PRMT and IR to R	554	565	489	479
Herds with reactors	271	280	232	215

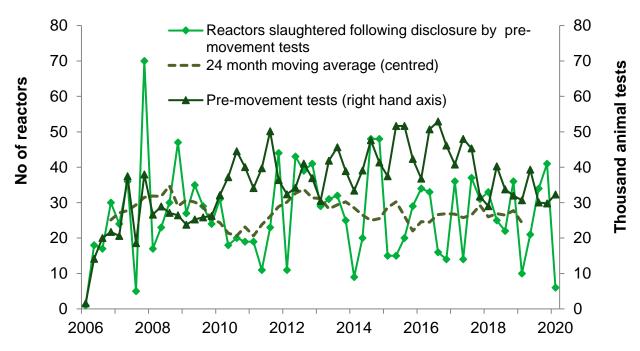
Annual numbers of pre-movement tests (PRMT) in England increased by 4% between 2015 and 2016. This followed the expansion of the areas under annual routine testing and the division of England on 1 January 2013 into a Low Risk Area (on background four-yearly herd testing) and High Risk and Edge Areas (where cattle herds were placed on annual or six-monthly surveillance testing). Annual numbers of pre-movement tests in England decreased by 4% between 2016 and 2019.

Since 2013 the number of herds in England that have had reactors disclosed by premovement 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.

## **Wales Pre-movement TB Testing**

The policy was introduced to Wales in 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 premovement tests, since the rollout of the policy in March 2006



Note: "reactors slaughtered" timeline excludes inconclusive reactors (IR) that became reactors (R) at retest – known as IR to R.

Table 3 Wales pre-movement TB tests quarterly

	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
Measure	2019	2019	2019	2020
All movements	244,518	195,656	242,585	201,526
Pre-movement animal tests	39,327	30,049	29,779	32,307
Pre-movement test reactors	21	34	41	6
Total reactors: PRMT and IR to R	23	34	50	7
Herds with reactors	16	14	17	4

Table 4 Wales pre-movement TB tests annually, 2016 to 2019

Measure	2016	2017	2018	2019
All movements	872,081	894,532	917,358	879,979
Pre-movement animal tests	186,538	165,786	134,984	129,849
Pre-movement test reactors	97	118	116	106
Total reactors: PRMT and IR to R	117	134	136	128
Herds with reactors	52	57	55	54

From 1 October 2017 farmers in the Low TB Area of Wales are not required to premovement test (PRMT) cattle (some exceptions apply). In the 12 months before the policy change farmers in the Low TB area paid for 50,304 PRMT, around 45,000 of these tests in Wales would now not be required. This represents 25% of all PRMT in Wales during the 12 month period before the policy change. The underlying statistical dataset from 2006 (Table B: Wales Pre-movement tests) is available to download.

# **Scotland Post-movement TB Testing**

Introduced in 2005, all cattle 42 days old and over in a yearly testing area must be premovement 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

	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
Measure	2019	2019	2019	2020
Post-movement tests (POMT)	408	313	722	265
Post-movement test reactors	0	0	0	0
Total reactors: POMT and IR to R	0	0	0	0
Herds with reactors	0	0	0	0

Table 6 Scotland post-movement tests annually, 2016 to 2019

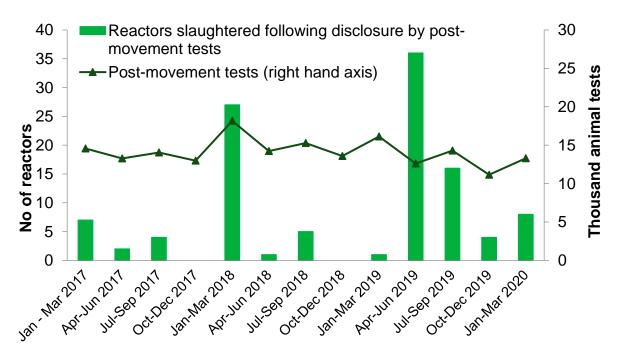
Measure	2016	2017	2018	2019
Post-movement tests	1,414	1,218	1,223	1,859
Post-movement test reactors	0	0	1	0
Total reactors: POMT and IR to R	0	0	1	0
Herds with reactors	0	0	1	0

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 increased in recent years from 1,414 in 2016 to 1,859 in 2019. 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.

## 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 postmovement tests, since the rollout of the policy in April 2016



Note: "reactors slaughtered" timeline excludes inconclusive reactors (IR) that became reactors (R) at retest – known as IR to R.

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

Measure	Apr-Jun 2019	Jul-Sep 2019	Oct-Dec 2019	Jan-Mar 2020
Cattle movements on to the LRA from				
Wales and higher risk areas of England	27,476	24,861	27,139	25,897
Post-movement tests (POMT)	12,612	14,291	11,157	13,297
POMT reactors	36	16	4	8
Total reactors: POMT and IR to R	40	17	5	9
Herds with reactors	2	2	1	6

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

	Apr-Dec			
Measure	2016	2017	2018	2019
Cattle movements on to the LRA from				
Wales and higher risk areas of England	77,212	117,875	115,431	104,521
Post-movement tests (POMT)	10,020	54,861	61,254	54,192
POMT reactors	1	13	33	57
Total reactors: POMT and IR to R	1	15	34	63
Herds with reactors	1	10	8	6

The latest quarter identified 8 reactors plus an additional reactor that was an IR that became reactor at retest. The quarterly testing effort has remained relatively consistent since 2017, with the number of reactors disclosed ranging from 0 to 40. The underlying statistical dataset (Table D: England post-movement tests) is available to download.

# **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.

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 the previous year (or earlier if tested when non-compliance was found).

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

Measure	Apr-Jun 2019	Jul-Sep 2019	Oct-Dec 2019	Jan-Mar 2020
Cattle movements on to the Low TB				
Area from higher risk areas of England				
and Wales	5,609	3,376	4,041	3,898
Post-movement tests (POMT)	2,043	3,796	2,438	2,149
POMT reactors	0	0	0	0
Total reactors: POMT and IR to R	0	0	0	0
Herds with reactors	0	0	0	0

Table 10 Post-movement testing in Low TB Area of Wales, annually

	Oct-Dec		
Measure	2017	2018	2019
Cattle movements on to the Low TB Area from			
higher risk areas of England and Wales	5,078	14,335	16,091
Post-movement tests (POMT)	63	8,751	10,786
POMT reactors	0	0	0
Total reactors: POMT and IR to R	0	0	0
Herds with reactors	0	0	0

To date no reactors have been detected in herds in Low TB Area of Wales under the post movement testing policy. The underlying statistical dataset (Table E: Wales post-movement tests) is available to download.

### About these statistics

## 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 2018.

#### Feedback on these statistics

We encourage our users to engage with us so we can improve our National and Official Statistics and identify gaps in the statistics that we produce.

This document has been designed to meet the accessibility requirements outlined in WCAG 2.1. Should you have any comments on this statistical release and how to improve it to meet your needs please contact us by email to <a href="mailto:tbstatistics@defra.gov.uk">tbstatistics@defra.gov.uk</a>

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## **Glossary of terms**

	Definition
<b>Term</b> AFU	Definition Approved Finishing Units.
AFU	Approved Finishing Onlis.
	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.
APHA	Animal and Plant Health Agency.
CTS	Cattle Tracing System.
EFU	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. From 1 January 2018 no EFUs exist in Wales.
IR	Inconclusive reactor. An animal showing a positive reaction to tuberculin that was not strong enough for it to be deemed a reactor. These animals may be tested again after 60 days or can be slaughtered voluntarily.

Term	Definition
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.
POMT	General term for all types of post movement tests.
POSTLRAOV	LRA Post-Movement TB Test Code
POSTMOVOV	Wales Low TB Area Post-Movement Test Code
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 or more frequently 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.
R	Reactor. An animal which was compulsorily slaughtered because it responded to the tuberculin skin test in a way that was consistent with it being infected with Mycobacterium bovis.

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