



Department
for Environment
Food & Rural Affairs



Monthly publication of National Statistics on the Incidence of Tuberculosis (TB) in Cattle to end November 2013 for Great Britain

These statistics were released today, Wednesday 12 February 2014 at 09:30, with the next notice to be updated on Wednesday 12 March 2014 at 09:30.

These statistics are obtained from the Animal Health and Veterinary Laboratories Agency (AHVLA) work management IT support system (Sam), used for the administration of TB testing in GB. They are a snapshot of the position on the date on which the data were extracted. These statistics may be subject to regular revision until all test results are available. In particular figures from 2011 onwards will be subject to further revision as test and incident records are completed.

The key points relating to November 2013 are :-

- All statistics that were suspended last month have now been re-introduced. There have been significant revisions to the number of herds that are not officially Tb free during 2012 and 2013. The scale of these revisions is detailed on pages 2 and 3. The headline incidence rate was not affected.
- Short term changes in these statistics should be considered in the context of long term trends. The charts and tables in this statistical notice illustrate how the trend in bovine TB incidence has changed since 1996.
- The provisional incidence rate for January to November 2013 is 4.5% compared to 4.8% for January to November 2012. However, care needs to be taken not to read too much into short term figures, especially as this figure includes a number of unclassified incidents. As such, the incidence rates are subject to further revisions as more tests and their results for the period are input.
- The number of new herd incidents during the period January to November 2013 was 4,456 compared to 4,758 for January to November 2012. The number of tests on officially TB free herds was 66,251 during January to November 2013, compared to 67,959 during January to November 2012.
- The number of cattle compulsorily slaughtered as reactors or direct contacts was 30,220 during January to November 2013, compared to 34,896 during January to November 2012.

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Revisions Overview:

The number of herds that are not officially TB Free (non-OTF) due to a TB incident has been significantly revised downwards for 2012 and 2013. There has been a small downward revision in the number of new herd incidents. All other statistics, including the headline incidence rate, are unaffected.

Background:

In the previous monthly statistical notice of the 15th January, the publication of the majority of bovine tuberculosis (TB) statistics in Table 1 was suspended from September 2011 onwards. At that time, the Animal Health and Veterinary Laboratories Agency (AHVLA) had identified a data classification problem in the source data stored in their IT system (Sam). This had resulted in incorrect statistics being produced for the number of herds that are not Officially TB free due to a TB incident (breakdown). It was not fully understood at the time whether other TB statistics relating to the number of tests in OTF herds, the number of new breakdowns, and the headline TB incidence rate were also affected. Therefore, these were also suspended as a precaution.

The AHVLA has now completed an exercise to investigate and amend the affected records. Approximately 2,500 herd records have been reviewed and corrected where they were found to be in error. This notice contains the revised TB statistics from September 2011.

Revisions Summary:

- The main TB statistic affected was the number of non-OTF herds due to a TB breakdown between September 2011 and September 2013 (Table 1, column 2). These figures have been revised and published in this notice.
- There has also been a small downward revision in the number of new herd incidents (Table 1, column 4). The total number of new herd incidents in GB during 2012 has been revised from 5,201 to 5,154. The number of new herd incidents in GB between January 2013 and September 2013 has been revised from 3,556 to 3,487.
- All other TB statistics that were not published on 15 January as a precaution, including our headline TB incidence statistic (the number of OTFW breakdowns as a percentage of tests on OTF herds, as shown in Table 1, column 6), were not affected and have been re-introduced in this notice.

Scale of the revisions to non-OTF herd statistics:

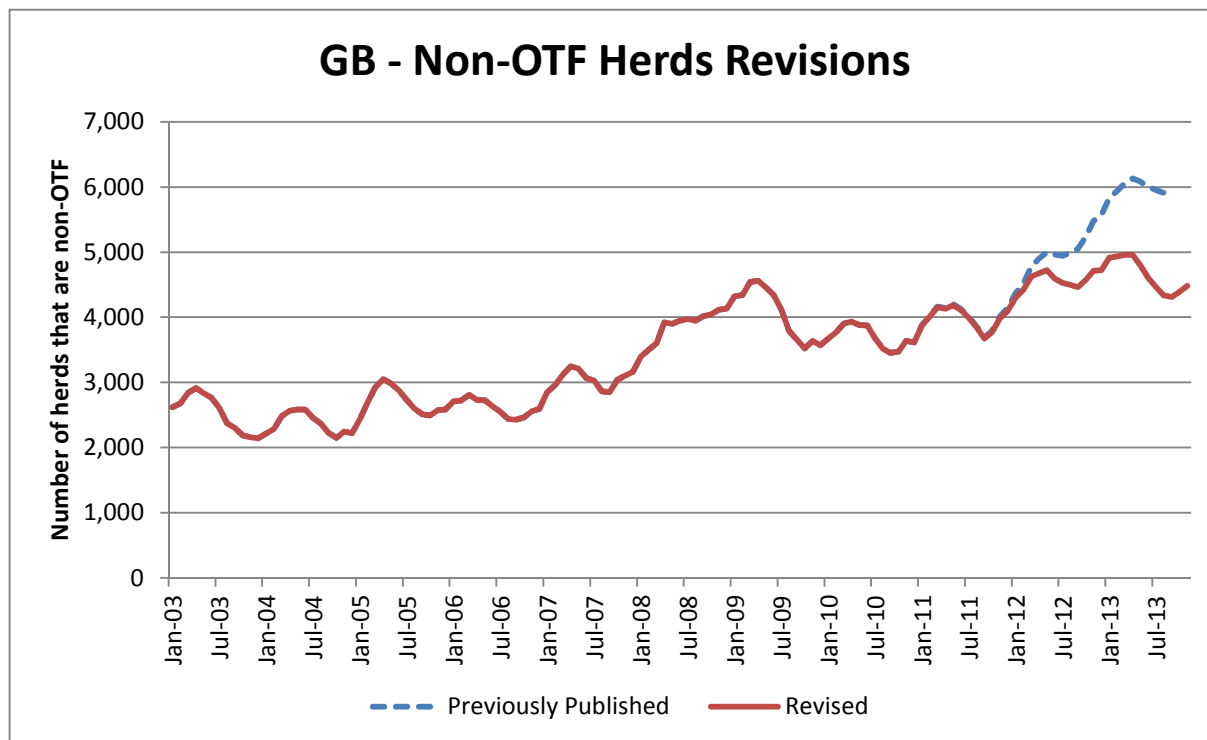
As a result of the data checks carried out by AHVLA, the numbers of non-OTF herds due to a TB breakdown that were originally reported for 2012 and 2013 have been revised downwards. The table below shows the previously incorrect published figures (taken from the statistics notice published on 11th December 2013 and containing data up to September 2013) and the revised statistics published today. The table shows the effect of the revisions for England, Wales, Scotland and Great Britain as a whole. The differences between the corrected and old figures are greater for the more recent months, as the effect of the errors was cumulative over the affected period:

Herds not officially TB free due to a bovine TB incident (non-OTF herds)

	England		Wales		Scotland		Balancing Item		GB	
	Previously published	Revised	Previously published	Revised	Previously published	Revised	Previously published	Revised	Previously published	Revised
Sep-11	2,873	2,866	790	779	17	16	12	12	3,692	3,673
Oct-11	2,943	2,934	799	788	15	14	34	34	3,791	3,770
Nov-11	3,121	3,105	832	819	15	14	51	51	4,019	3,989
Dec-11	3,211	3,179	866	850	16	13	52	52	4,145	4,094
Jan-12	3,388	3,341	908	886	22	19	54	53	4,372	4,299
Feb-12	3,500	3,434	928	906	25	22	58	57	4,511	4,419
Mar-12	3,706	3,582	982	958	32	29	58	57	4,778	4,626
Apr-12	3,774	3,588	1,033	999	38	35	55	54	4,900	4,676
May-12	3,823	3,589	1,087	1,049	36	33	53	51	4,999	4,722
Jun-12	3,791	3,488	1,086	1,031	35	32	49	47	4,961	4,598
Jul-12	3,752	3,405	1,105	1,043	36	32	50	48	4,943	4,528
Aug-12	3,804	3,395	1,102	1,021	36	32	53	51	4,995	4,499
Sep-12	3,846	3,359	1,107	1,015	39	35	58	55	5,050	4,464
Oct-12	3,994	3,445	1,140	1,034	39	34	64	61	5,237	4,574
Nov-12	4,185	3,560	1,169	1,043	43	35	79	74	5,476	4,712
Dec-12	4,296	3,607	1,151	1,011	41	31	82	76	5,570	4,725
Jan-13	4,508	3,765	1,186	1,034	45	35	85	78	5,824	4,912
Feb-13	4,611	3,790	1,191	1,024	45	35	90	83	5,937	4,932
Mar-13	4,725	3,824	1,196	1,019	45	33	92	84	6,058	4,960
Apr-13	4,821	3,860	1,174	982	42	28	95	87	6,132	4,957
May-13	4,784	3,739	1,159	952	43	27	93	81	6,079	4,799
Jun-13	4,734	3,593	1,122	896	42	25	99	87	5,997	4,601
Jul-13	4,714	3,493	1,091	855	42	24	105	93	5,952	4,465
Aug-13	4,716	3,423	1,046	794	43	25	107	95	5,912	4,337
Sep-13	4,778	3,417	1,032	775	42	24	109	96	5,961	4,312

(Note - The “balancing item” column represents herds where the country information has not been captured in the source data.)

The graph below also shows the scale of the revisions in the context of the longer time series for GB:



Quality Assurance

Since this problem was identified, Defra statisticians and AHVLA IT experts have been working closely to review and strengthen quality assurance procedures in relation to bovine TB data.

A quality assurance plan will be produced and published by the end of April 2014.

Figure 1: Number of officially TB free herd status being withdrawn incidents, as a percentage of tests on officially TB free herds :-

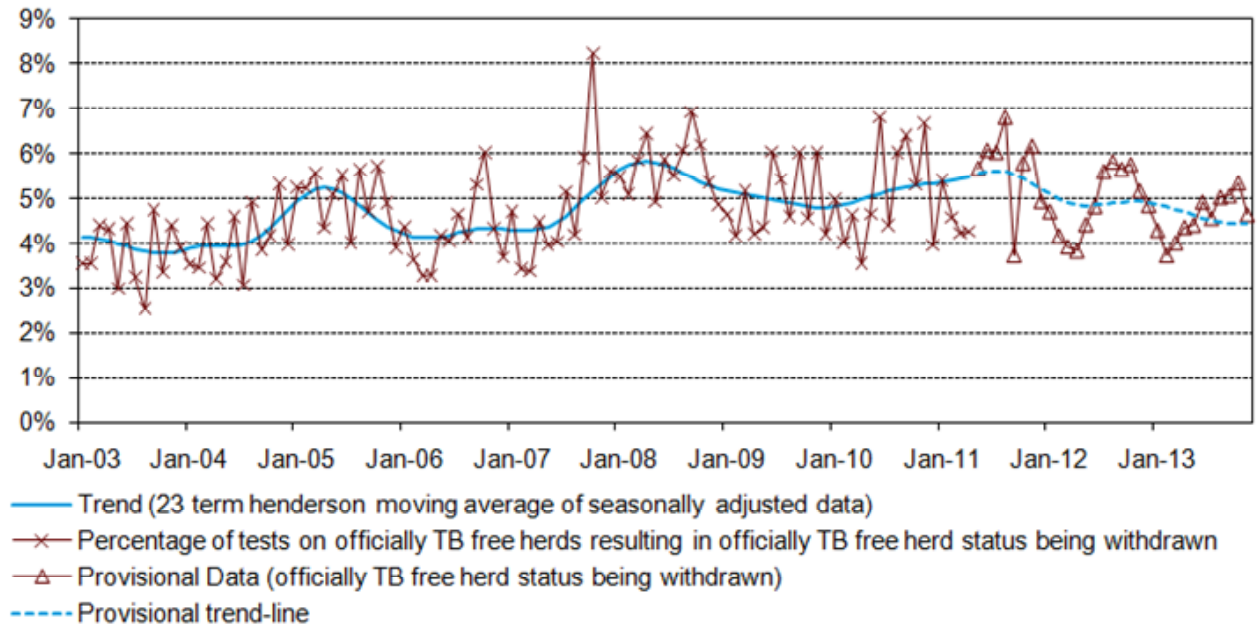
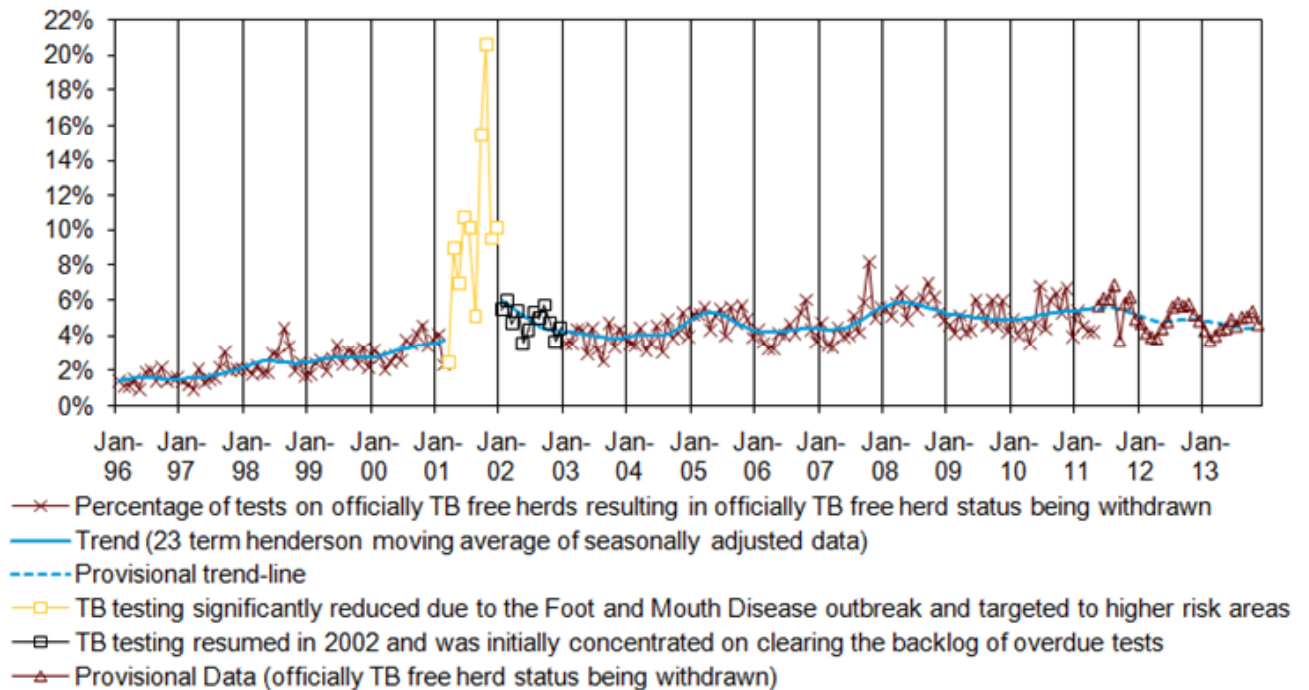


Figure 2: Number of officially TB free herd status being withdrawn incidents, as a percentage of tests on officially TB free herds :-



The charts published in this statistical notice, together with the equivalent figures from January 1996 onwards, are also available in spreadsheet format on the Defra web site at :- <https://www.gov.uk/government/publications/incidence-of-tuberculosis-tb-in-cattle-in-great-britain>. Visit the second link (MS Excel spreadsheet) entitled "Incidence of TB in cattle in Great Britain - GB dataset".

Methodology

For a description of the data sources and methodology used in the calculation of the TB statistics, together with notes on data revisions policy etc. Refer to the Annex 1 document at :- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/264371/bovinetb-annex-11dec13.pdf

Further Information

1. This statistical notice and a wide range of other statistics are available on the internet at - <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics>

TABLE 1: TB INCIDENTS IN GREAT BRITAIN - HERDS

		Total tests on herds	Herds not Officially TB free due to a bovine TB incident (non-OTF Herds)	Tests on officially TB free herds (OTF)	New herd incidents (NHI)	NHI of which: officially TB free herd status withdrawn (OTFW)	Number of OTFW incidents as a percentage of tests on officially TB free herds
		(1)	(2)	(3)	(4)	(5)	(6)
1996		36,314	1,589	34,812	1,075	490	1.4%
1997		34,065	1,632	32,295	1,195	540	1.7%
1998		37,046	2,077	34,502	1,514	787	2.3%
1999		41,365	2,374	38,338	1,661	967	2.5%
2000		40,669	2,482	37,184	1,738	1,135	3.1%
2001	*	13,187	1,697	11,118	802	571	5.2%
2002	**	49,709	4,167	43,641	3,323	2,042	4.7%
2003		56,208	5,460	47,568	3,214	1,789	3.8%
2004		56,836	5,220	49,027	3,341	1,934	4.0%
2005		55,887	5,669	46,725	3,665	2,308	4.9%
2006		64,457	5,859	56,051	3,530	2,303	4.1%
2007		64,145	6,582	54,856	4,188	2,546	4.7%
2008		66,432	7,935	54,854	5,011	3,093	5.6%
2009		72,205	8,386	58,894	4,599	2,847	4.9%
2010		74,474	7,964	61,587	4,723	3,013	4.9%
2011	(prov)	76,659	8,240	62,489	4,909	3,109	5.2%
2012	(prov)	88,576	8,968	73,659	5,154	3,470	4.8%
2013	(prov)	79,962	8,870	66,251	4,456	2,961	4.5%
2011	Jan	(prov) 7,830	3,869	6,531	538	350	5.4%
	Feb	(prov) 7,910	4,012	6,653	464	302	4.6%
	Mar	(prov) 8,615	4,152	7,486	510	312	4.2%
	Apr	(prov) 7,035	4,130	5,694	396	240	4.3%
	May	(prov) 6,142	4,186	4,898	467	270 - 285	5.5% - 5.8%
	Jun	(prov) 4,675	4,108	3,415	347	202 - 212	5.9% - 6.2%
	Jul	(prov) 4,656	3,994	3,388	300	183 - 225	5.4% - 6.6%
	Aug	(prov) 4,231	3,849	3,209	292	188 - 248	5.9% - 7.7%
	Sep	(prov) 5,899	3,673	4,659	252	166 - 183	3.6% - 3.9%
	Oct	(prov) 6,009	3,770	5,025	422	282 - 299	5.6% - 6.0%
	Nov	(prov) 6,564	3,989	5,571	489	331 - 355	5.9% - 6.4%
	Dec	(prov) 7,093	4,094	5,960	432	283 - 305	4.7% - 5.1%
2012	Jan	(prov) 8,194	4,299	6,995	485	326 - 333	4.7% - 4.8%
	Feb	(prov) 9,061	4,419	7,701	465	316 - 327	4.1% - 4.2%
	Mar	(prov) 11,718	4,626	10,283	592	400 - 408	3.9% - 4.0%
	Apr	(prov) 7,892	4,676	6,535	406	248 - 254	3.8% - 3.9%
	May	(prov) 7,306	4,722	5,994	448	261 - 269	4.4% - 4.5%
	Jun	(prov) 5,425	4,598	4,176	325	200 - 203	4.8% - 4.9%
	Jul	(prov) 5,064	4,528	3,862	313	215 - 217	5.6% - 5.6%
	Aug	(prov) 5,420	4,499	4,242	353	244 - 249	5.8% - 5.9%
	Sep	(prov) 5,882	4,464	4,743	368	264 - 271	5.6% - 5.7%
	Oct	(prov) 6,816	4,574	5,748	444	328 - 333	5.7% - 5.8%
	Nov	(prov) 9,061	4,712	7,680	559	393 - 401	5.1% - 5.2%
	Dec	(prov) 6,737	4,725	5,700	396	275 - 277	4.8% - 4.9%
2013	Jan	(prov) 8,762	4,912	7,348	498	311 - 320	4.2% - 4.4%
	Feb	(prov) 9,001	4,932	7,559	399	280 - 285	3.7% - 3.8%
	Mar	(prov) 9,252	4,960	8,010	490	319 - 325	4.0% - 4.1%
	Apr	(prov) 8,081	4,957	6,607	423	285 - 291	4.3% - 4.4%
	May	(prov) 7,354	4,799	5,972	402	261 - 266	4.4% - 4.5%
	Jun	(prov) 5,084	4,601	3,946	322	191 - 197	4.8% - 5.0%
	Jul	(prov) 5,080	4,465	3,860	277	174 - 178	4.5% - 4.6%
	Aug	(prov) 5,546	4,337	4,409	326	220 - 223	5.0% - 5.1%
	Sep	(prov) 5,980	4,312	4,911	350	248 - 249	5.0% - 5.1%
	Oct	(prov) 7,267	4,389	6,205	468	329 - 334	5.3% - 5.4%
	Nov	(prov) 8,555	4,482	7,424	501	343 - 346	4.6% - 4.7%

Notes:- The data are a snapshot extracted from Sam. Data for 2011 onwards will remain provisional and subject to revision until all culture results are available and final data validation has been carried out. The herd incidence rates for the latest months are given as a range because a number of incidents are still unclassified, so data for these months should be treated as provisional results.

- (1) Herds for which tuberculin skin testing is carried out on at least one animal during the period shown. Does not include gamma tests.
 - (2) Herds that had lost their OTF status at some time during the period shown due to a TB incident.
 - (3) Any test carried out in an OTF herd during the period shown. Does not include gamma tests.
 - (4) Herds which were previously OTF but either had cattle that reacted to a tuberculin test or had a tuberculous animal disclosed by routine meat inspection at slaughter, during the period shown.
 - (5) New herd incidents (column 4) where OTF status was withdrawn from the herd.
 - (6) Column 5 as a percentage of column 3.
- * Data for 2001 are not comparable with other years. During the outbreak of Foot and Mouth Disease, TB testing was significantly reduced and necessarily targeted to areas of higher risk.
- ** Data for 2002 are not comparable with other years. Testing resources were concentrated on herds overdue their tests (because of the backlog caused by the Foot and Mouth Disease outbreak).

TABLE 2: TB INCIDENTS IN GREAT BRITAIN - ANIMALS

		Total tests on herds	Total cattle tests	Cattle compulsorily slaughtered as reactors or contacts:		
				Total	Reactors	Direct contacts
		(1)	(2)	(3)	(4)	(5)
1996		36,314	2,249,891	3,776	3,151	625
1997		34,065	2,170,630	3,384	3,017	367
1998		37,046	2,447,848	5,685	4,782	903
1999		41,365	2,825,177	6,754	5,794	960
2000		40,669	2,931,658	8,123	6,877	1,246
2001	*	13,187	1,181,861	6,156	5,200	956
2002	**	49,709	3,961,145	22,072	19,191	2,881
2003		56,208	4,474,526	23,972	20,798	3,174
2004		56,836	4,604,721	22,214	19,636	2,578
2005		55,887	4,811,699	29,231	25,627	3,604
2006		64,457	5,417,573	22,062	20,090	1,972
2007		64,145	5,753,244	26,882	25,330	1,552
2008		66,432	6,178,789	39,007	36,968	2,039
2009		72,205	6,840,568	37,979	36,739	1,240
2010		74,474	7,447,653	31,949	31,277	672
2011	(prov)	76,659	7,587,837	34,238	33,453	785
2012	(prov)	88,576	8,026,003	37,734	37,049	685
2013	(prov)	79,962	7,673,649	30,220	29,368	852
2011	Jan	(prov) 7,830	789,054	2,656	2,591	65
	Feb	(prov) 7,910	783,669	3,582	3,535	47
	Mar	(prov) 8,615	847,824	3,154	3,116	38
	Apr	(prov) 7,035	752,330	2,604	2,562	42
	May	(prov) 6,142	559,750	2,881	2,836	45
	Jun	(prov) 4,675	458,101	3,180	2,939	241
	Jul	(prov) 4,656	489,866	2,454	2,417	37
	Aug	(prov) 4,231	402,353	2,619	2,573	46
	Sep	(prov) 5,899	581,614	2,520	2,467	53
	Oct	(prov) 6,009	559,254	2,129	2,050	79
	Nov	(prov) 6,564	680,094	3,164	3,108	56
	Dec	(prov) 7,093	683,928	3,295	3,259	36
2012	Jan	(prov) 8,194	720,196	2,580	2,537	43
	Feb	(prov) 9,061	782,134	3,769	3,714	55
	Mar	(prov) 11,718	990,541	3,124	3,090	34
	Apr	(prov) 7,892	722,232	2,805	2,774	31
	May	(prov) 7,306	579,835	3,467	3,414	53
	Jun	(prov) 5,425	489,401	2,526	2,460	66
	Jul	(prov) 5,064	477,335	3,311	3,244	67
	Aug	(prov) 5,420	486,855	2,989	2,864	125
	Sep	(prov) 5,882	547,314	2,637	2,619	18
	Oct	(prov) 6,816	655,610	3,935	3,874	61
	Nov	(prov) 9,061	931,608	3,753	3,681	72
	Dec	(prov) 6,737	642,942	2,838	2,778	60
2013	Jan	(prov) 8,762	771,790	3,200	3,141	59
	Feb	(prov) 9,001	813,937	3,104	2,997	107
	Mar	(prov) 9,252	851,282	2,973	2,860	113
	Apr	(prov) 8,081	825,180	2,726	2,690	36
	May	(prov) 7,354	664,231	3,243	2,962	281
	Jun	(prov) 5,084	481,223	2,035	2,004	31
	Jul	(prov) 5,080	512,474	2,706	2,651	55
	Aug	(prov) 5,546	535,764	2,523	2,470	53
	Sep	(prov) 5,980	575,635	2,105	2,067	38
	Oct	(prov) 7,267	721,747	2,855	2,811	44
	Nov	(prov) 8,555	920,386	2,750	2,715	35

Notes: The data are a snapshot extracted from Sam. Data for 2011 onwards will remain provisional and subject to revision each month until all culture results are available and final data validation has been carried out.

- (1) Herds in which tuberculin skin testing was carried out in at least one animal during the period shown. Does not include gamma tests. (same as column 1 in Table 1).
- (2) Count of the number of tests on cattle. An individual animal could be tested more than once in each time period.
- (3) Animals compulsorily slaughtered because they reacted to the tuberculin skin test or because they were considered to be direct contacts (see below). Not all of these animals showed evidence of *Mycobacterium bovis* infection at post-mortem examination.
- (4) 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*.
- (5) An animal in an OTFW incident that, although not a test reactor, was considered to have been exposed to *Mycobacterium bovis* and compulsorily slaughtered.
- * Data for 2001 are not comparable with other years. During the outbreak of Foot and Mouth Disease, TB testing was significantly reduced and necessarily targeted to areas of higher risk.
- ** Data for 2002 are not comparable with other years. Testing resources were concentrated on herds overdue their tests (because of the backlog caused by the Foot and Mouth Disease outbreak).