

Farm Level bovine TB Reports – how they can help you and your vet

Animal & Plant Health Agency (APHA) is making more data available to farmers in England and Wales to help tackle bovine TB



Standardised bTB reports for individual farms are produced by APHA using TB breakdown and cattle movement data

The reports are made available to farmers with new TB breakdowns in the Edge and High Risk Areas of England and in Wales, to help them understand the TB risks to their herd and take action to reduce these risks. Reports are posted out a few weeks after the start of a TB breakdown. **It is strongly recommended that farmers share these reports with their private vet**

The reports help affected farmers and their private vets understand:

- The level of TB risk to the herd
- The impact of previous TB breakdowns on the herd (if applicable)
- The pattern of cattle movements and its potential effect on the herd's TB risk
- The reasons for the pattern of TB breakdowns in the herd (if applicable)



Farm Level bovine TB (bTB) Report

CPH XX/XXX/XXXX

Introduction:

This document will help you in, conjunction with your private vet, to understand the following:

- the level of bTB risk to your herd
- the impact any bTB incident has had on your herd in the past
- the impact and effect of patterns of cattle movement on your herd
- the reasons for the pattern of bTB incidence in your herd, or its absence
- the level of risk posed by any bTB infection detected in the local area

The first part of the document details information held by the Animal & Plant Health Agency (APHA), the Rural Payments Agency (RPA) and Rural Payments Wales (RPW) and includes any TB breakdowns your herd has been affected by in the past. The second part of the document contains Cattle Tracing System (CTS) information on the movements of cattle onto your holding in the past five years.

Included on the final page is a map of your current holding based on the information RPA/RPW holds on your business. This depicts the recent (2015 to 2021) whole genome sequencing (WGS) clade and/or genotype (strain) of the bovine TB bacterium (*Mycobacterium bovis*) causing breakdowns in other herds in the area, where applicable.

Please contact the relevant organisation if you believe any of the information is inaccurate.

Any new TB breakdown in your herd is likely to be the result of one or more of the following four factors:

- **Infection from wildlife sources.** Measures to keep cattle separate from wildlife, particularly badgers are always advisable, but it is particularly true if your holding is in a high TB incidence area of England or Wales. Visit the TB hub <https://tbhub.co.uk/> for practical advice on reducing direct and indirect contact between cattle and badgers.
- **Residual infection from a previous breakdown.** While the TB tests used are the best available, they are not 100% sensitive and so bTB infected animals may remain undetected in the herd at the end of a breakdown when movement restrictions have been lifted.
- **New cattle brought into your herd.** In the Low Risk Area (LRA) of England and the Low TB Area of Wales infection is often introduced into the herd by cattle purchased from higher incidence areas. This is the case even when we pre-movement test those cattle, as some

The **first part** of the report describes the herd type & size, and any TB breakdowns that have occurred on the holding over the last 10 years, along with the causative strain of the TB bacterium (*Mycobacterium bovis*) identified in the laboratory if the culture results were positive.

Part 1: Your herd and its bTB history

bTB Extraction Date: DD-MMM-YYYY

The first table simply shows how your herd is depicted in our database, giving it CPH and CPHH numbers, herd type and herd size reported at the last bTB test, if applicable (below).

Herd Information

CPH	CPHH	Herd Type	Herd Size

Herd WGS Clades (1) / Genotype Homeranges

CPHH		

Genotype or whole genome sequence (WGS) clade of *M. bovis* identified on the holding in the past

County Parish Holding (CPH), herd type & size

The genotype or WGS clade of *M. bovis* (if found) can help identify the most likely source of the TB breakdown. By identifying the source of infection, measures can be put in place to reduce the risk of introduction of TB. Visit the **TB hub** to find out more about the Five-Point Plan and how you can help protect your herd against TB.

Infection from purchased cattle

Take time to investigate the TB history of the herd and area that you are buying from. Before buying cattle check <https://www.ibtb.co.uk/> an online interactive mapping tool showing the location of TB breakdown herds in England and Wales over the last 10 years. Ask the seller about the TB history of the herd and the last herd TB test. Isolate incoming cattle from the rest of the herd and consider post-movement testing if it's not a statutory requirement

Infection from infected badgers

Make sure that your on-farm biosecurity is up to scratch. Visit <https://www.tbhub.co.uk/> for practical advice on reducing direct and indirect contact between cattle and badgers. Contact the **TB Advisory Service** for bespoke advice on TB biosecurity



Infection from neighbouring cattle

Make sure that your boundaries at pasture are secure and sufficient to prevent any nose-to-nose contact with neighbouring cattle. Avoid common grazing of cattle

- Duration in days
- Start and end date
- Number of animals skin tested during the breakdown
- Number of animals interferon-gamma blood tested (if applicable) during the breakdown
- Test type that revealed the breakdown (disclosing test)
- Total number of skin test reactors found during the breakdown
- Total number of animals removed (i.e. reactors plus any inconclusive reactors, direct contacts and slaughterhouse cases)
- Genotype or WGS clade of *M. bovis* isolated

Information about TB breakdowns that have occurred on the holding over the last 10 years

bTB Breakdown and Reactor History											
Herd	Duration (Days)	Start Date (TB02) [3]	End Date (TB10) [4]	Skin Tests	IFN Tests	Disclosing Test	Reactors	Total Removed	2xIRs Removed	1xIR/ DCs Removed	WGS Clades/Genotypes

Animals removed for bTB control purposes			
Herd	Breakdown	Start Date	
Slaughter Date	Ear Tag	Age (Months)	Reason

R - Reactor
 SL - Slaughterhouse case
 DC - Dangerous Contact
 IR - Inconclusive Reactor

[3] The start date is the date that TB02 movement restrictions were placed on the herd following disclosure of one or more reactors or a slaughterhouse case.
 [4] The end date is the date that TB02 movement restrictions were lifted by a TB10 notice at the end of the TB breakdown/incident.

Further details are provided for each animal taken for TB control purposes:

- Slaughter date
- Ear tag number
- Age
- Reason for slaughter i.e. skin test reactor, slaughterhouse case, inconclusive reactor or direct contact

Animals removed for bTB control purposes			
Herd	Breakdown Start Date		
Slaughter Date	Ear Tag	Age (Months)	Reason

R - Reactor
 \$L - Slaughterhouse case
 DC - Dangerous Contact
 IR - Inconclusive Reactor

Information about all of the TB skin tests that have been carried out on the holding over the past five years:

- Test date
- Test type
- Number of cattle tested
- Result (clear/not clear)
- Numbers of inconclusive reactors and reactors

Testing History for the last five Years

The table below, "Test history", shows all the TB tests that have been carried out in your herd in the past five years. This includes all statutory and private skin tests, and all government-funded blood tests.

Test History							
CPHH	Test Date	Test Type	Number of Cattle Tested	Result	IRs for Retest	Animals removed as reactors	Removed or Privately Slaughtered

The second part of the report contains information from the Cattle Tracing System (CTS) about the movements of cattle on to the holding in the past five years

This information will help assess the likelihood of introducing TB into the herd by buying in undetected infected cattle

Before purchasing cattle, check **ibTB** to investigate the TB history of the herd and area that you are buying from

The table shows how many cattle coming into the herd originated from each county listed, and the routine testing frequency of herds in that county

Part 2: Cattle movements into your herd in the past five years

Movement Data Extraction Date: DD-MMM-YYYY

This part of the document gives you detailed information about cattle that have moved into your herd in the past five years from the extraction date.

The first table, "Movement from County/Testing Interval (TI)", shows how many cattle coming into your herd originated from each county listed. In brackets, after each county name, is the surveillance testing interval (TI) of the area at the time of purchase, giving a crude indication of bTB risk. Six-monthly and annually tested areas are higher risk whereas four-yearly tested areas are lower risk. An exception to this is the Low TB Area of Wales where herds are tested annually. In the Intensive Action Area in Wales covering North Pembrokeshire and parts of Ceredigion and Carmarthenshire, herds are subject to six-monthly testing however the testing interval is recorded as annual in this document. You can find more information about routine TB testing intervals on gov.uk

Research shows that herds buying in from high incidence areas are more likely to experience a TB breakdown. This data shows you how many higher risk movements into your herd have taken place in the past five years. Checking ibTB <https://ibtb.co.uk/> may provide some additional information about the TB status of a herd, provided you know its location, so your purchasing decisions can be more informed.

N.B. Some counties may appear more than once, as you have purchased stock originating from them when the county or the area had a different testing interval. Movements of imported cattle are included but with no testing frequency or risk category.

Movement from County/TI	2020	2019	2016

The table shows the number of movements of cattle onto the holding coming from holdings that had a TB breakdown in the three years before the movement

This information can be used to assess the risk of introducing TB into the herd by buying in cattle. Buying from a herd that has had a TB breakdown in the past three years increases this risk. Checking **ibTB** will provide information about the TB status of the herd and the area you are buying cattle from

Movements from CPH with a Breakdown (OTF-S or OTF-W) in the Three Years prior to the movement

Below is a list of the number of movements of cattle on to your farm, coming from premises that had had a TB breakdown (confirmed or unconfirmed) in the three years before the movement. Herds that have had a breakdown recently are more likely to harbour infected animals than those that have not had a breakdown for many years (or ever). OTF-W is an indication that the herd may have been a higher TB risk than an OTF-S herd, at the time of purchase.

England

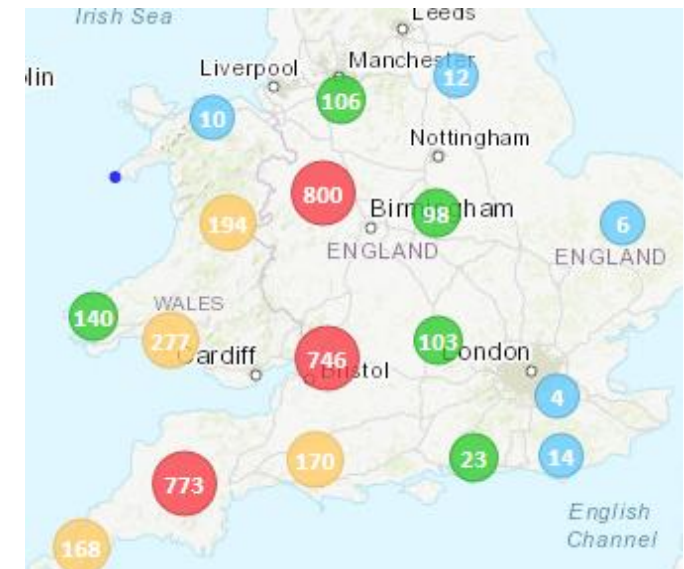
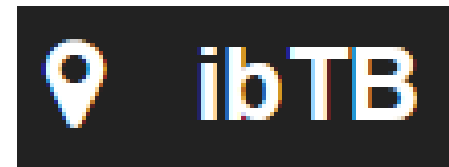
Officially TB free status suspended (OTF-S) is when one or more skin test reactors or IFN-gamma positive animals are detected in a herd, but no lesions typical of TB are found at post mortem inspection, and the culture results are negative for *M. bovis*, or pending. Officially TB free status withdrawn (OTF-W) is when one or more skin test reactors or IFN-gamma positive animals are detected with typical lesions of TB at post mortem inspection and/or there is a positive culture result for *M. bovis* during a TB breakdown, and/or the herd has one or more slaughterhouse cases with a culture result positive for *M. bovis*.

Wales

All breakdowns are OTF-W except in cases where only one skin test reactor is detected in a herd, no lesions typical of TB are found at post mortem inspection, the culture results are negative for *M. bovis* (or pending), and there are no epidemiological risk factors e.g.

- the reactor animal is a tracing from an OTF-W breakdown
- the herd has been OTF-W in the previous three years
- the herd is contiguous to a herd that has been OTF-W within the previous six months
- without the presence of skin test reactors having been found on the premises, a veterinary risk assessment concludes that the premises should be restricted and considered OTF-W based on the movements and disease picture within the herd.

Year	Number of Movements



The table shows the age range of cattle brought onto the holding:

- Less than 42 days
- 42 days to 15 months
- 15-30 months
- 30-16 months
- Over 60 months

Animal Movements by Age Range

This table demonstrates the type of cattle that you have brought into your herd in the past three years and may help you to identify TB risk, particularly if you can identify the groups where reactor animals were found. For example, the question should be asked whether reactors were associated with groups that primarily receive purchased stock.

Purchased cattle may increase the risk of bringing TB into your herd, particularly if they originate from the higher incidence areas of England and Wales and/or from a herd with a previous history of TB. Breeding stock are the riskiest class of animals you can purchase, because they are likely to spend a long period on your farm and have close contact with other cattle, for example the stock bull.

Year	< 42 Days	42 Days to 15 Months	15 to 30 Months	30 to 60 Months	Over 60 Months

This information can be helpful to identify the type of cattle bought into the herd and the associated risk

On the **final page** of the report is a map of the holding based on the information that the Rural Payments Agency (RPA) and Rural Payments Wales (RPW) hold, showing the recent genotypes or WGS clades of *M. bovis* isolated from TB breakdowns around the holding.

This information can help assess the risk of introduction of TB into the herd from neighbouring herds and gives an idea of the level of infection in cattle herds in the local area



Farmers receiving a report should share it with their **private vet** and use the information to improve their herd's resilience to TB by exploring practical solutions to reduce the risk of suffering TB breakdowns