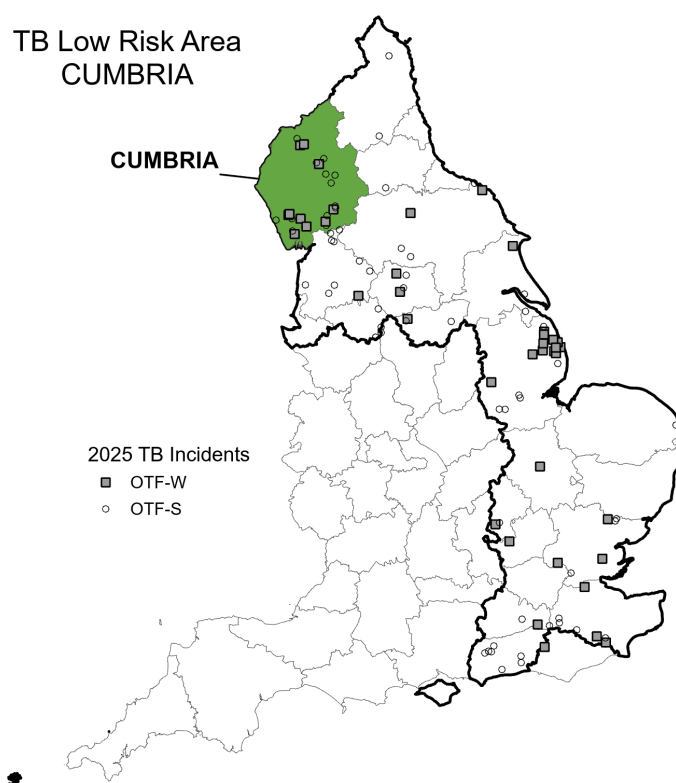




Animal &
Plant Health
Agency

Year End Descriptive Epidemiology Report: Bovine TB in the Low Risk Area of England 2025: Cumbria



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Introduction

This report describes the frequency and geographical distribution of TB in 2025 in cattle herds in Cumbria, which is part of the Low Risk Area of England (LRA).

This report is intended for those involved in the control of TB, both locally and nationally. This includes, but it is not limited to:

- cattle farmers
- private veterinarians
- government
- policy makers
- the scientific community

Details of the data handling methodology used in this report, a glossary of terms, and the TB control measures adopted in the LRA, can be found in the [explanatory supplement for the annual reports 2025](#).

Classification of TB incidents

Unless otherwise specified, this report includes all new TB incidents detected during the reporting period (1 January to 31 December 2025). This includes both 'Officially Tuberculosis-Free Status Withdrawn' (OTF-W) and 'Officially Tuberculosis-Free Status Suspended' (OTF-S) incidents.

OTF-W incidents are those involving the detection in the affected herd of at least:

- one reactor (positive animal) to the Single Intradermal Comparative Cervical Tuberculin (SICCT) test, or a positive animal to the supplementary interferon gamma (IFN- γ) blood test, with typical lesions of TB identified at post-mortem (PM) meat inspection, or
- one animal (such as a skin test reactor, IFN- γ test-positive animal, or slaughterhouse case) with *Mycobacterium bovis* (*M. bovis*) positive polymerase chain reaction (PCR) test or bacteriological culture results in tissue samples collected from carcasses during the PM inspection

OTF-S incidents are triggered by reactors to the skin test (or IFN- γ test-positive animals), but without subsequent detection of TB lesions or positive PCR test (or culture) results in any of those animals.

[Licensed Finishing Units](#) (LFUs) have been excluded from the numbers presented in this report due to the limited epidemiological impact of any TB detections in such units.

Cattle industry

There were 3,141 active cattle herds registered in Sam (APHA's operational database) in Cumbria on 31 December 2025 (Appendix 1).

Sam includes herd type and herd size, with size based on a herd's most recent test or when the herd was first registered. In this report herd size is generated for a point in time (31 December) from the number of on and off movements of cattle in the Cattle Tracing system (CTS) data accessible via the RADAR data warehouse. In the LRA where most cattle herds are OTF and tested every 4 years this can therefore provide a more recent description of the herd size at a point in time.

Further details on the data sources used in these reports can be found in the [explanatory supplement for the annual reports 2025](#).

Appendix 2 provides a summary of headline cattle TB statistics in Cumbria.

In 2025, Cumbria had 5 livestock markets approved by APHA to hold slaughter gatherings of cattle from OTF herds that are eligible for, but have not been subjected to, pre-movement TB testing (known as 'TB pre-movement testing-exempt' markets).

There was one LFU active in Cumbria during 2025 and this had an ongoing incident at the end of the year. There were no new or closed incidents in LFUs in 2025. Incidents in LFUs are excluded from the incident numbers presented in this report due to the limited epidemiological impact of these incidents.

In 2025 there were 2,162 beef herds, 856 dairy herds and 89 other herds active on the 31 December and 34 herds of undetermined type (Appendix 1). The number of beef herds has remained fairly constant over the last 10 years though with some gradual decline in the numbers of beef herds in the 1 to 50 (984 in 2016 and 874 in 2025) and 101 to 200 (447 in 2016 and 331 in 2025) size categories (Figure 1). Most size categories of dairy herds have remained consistent in number over time but with a reduction in number of herds in the 201 to 350 size category over the last 10 years (276 in 2016 and 206 in 2025).

The number of herds in the 'Other' production type category has remained low and consistent over time (Appendix 1). This category includes a range of herd types including but not limited to mixed herds, dealers, specialist breeders and non-standard holdings.

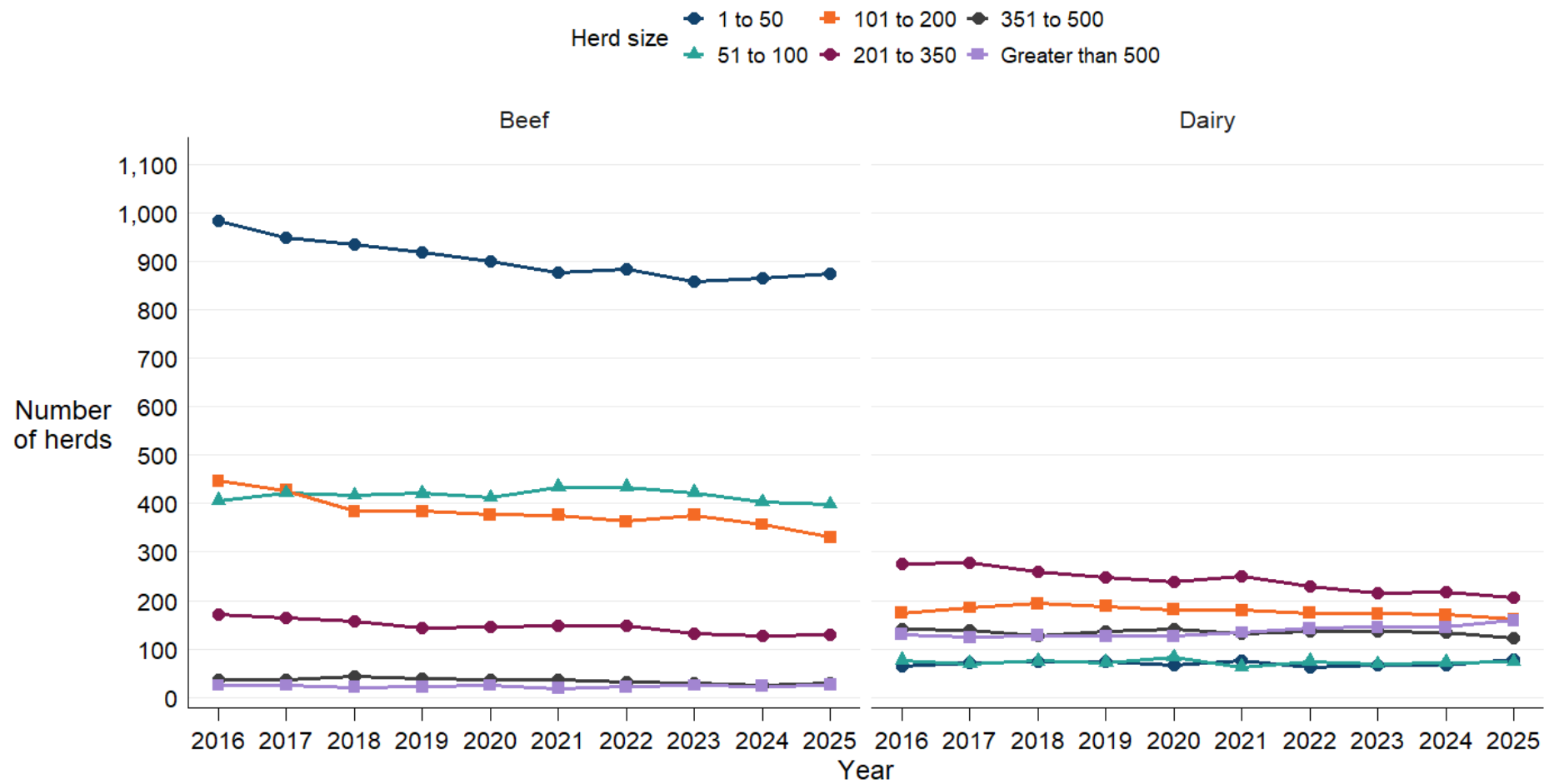


Figure 1: Number of herds with ≥ 1 animal on the last day of the reporting year in Cumbria by herd size and herd type (dairy and beef), between 2016 to 2025.

Number of new TB incidents

In 2025, 24 new TB herd incidents were declared in Cumbria, 10 OTF-W and 14 OTF-S (Figure 2). This represented a decrease of 15 TB incidents (38.5%) compared to the 39 new incidents disclosed in 2024, which was the highest number in the 10-year period 2016 to 2025. However, a peak in 2024 was to be expected given the initiation of Hotspot 29 (HS29), including the move to 6-monthly TB surveillance testing in October 2023. There were 13 incidents in that hotspot in 2024. Additionally, there were 9 incidents with some clustering in the south of the county in 2024. Although the total number of incidents declined significantly in 2025, it was still the highest number since before 2020 and, notably, the majority of these new incidents were outside the 2 TB hotspots active in the county.

The number of new OTF-W incidents was 10 in 2025, representing a decrease of 1 from 11 in 2024. Across the longer term from 2016 to 2025, there was a consistent decrease in OTF-W incidents from 2016 to 2020. However, from that point the number of OTF-W incidents has increased from 4 to 10 incidents.

The number of new OTF-S incidents was 14 in 2025, half the figure recorded in 2024. As previously described, the higher number in 2024 was partially attributable to both HS29 and to new incidents detected in the south of the county.

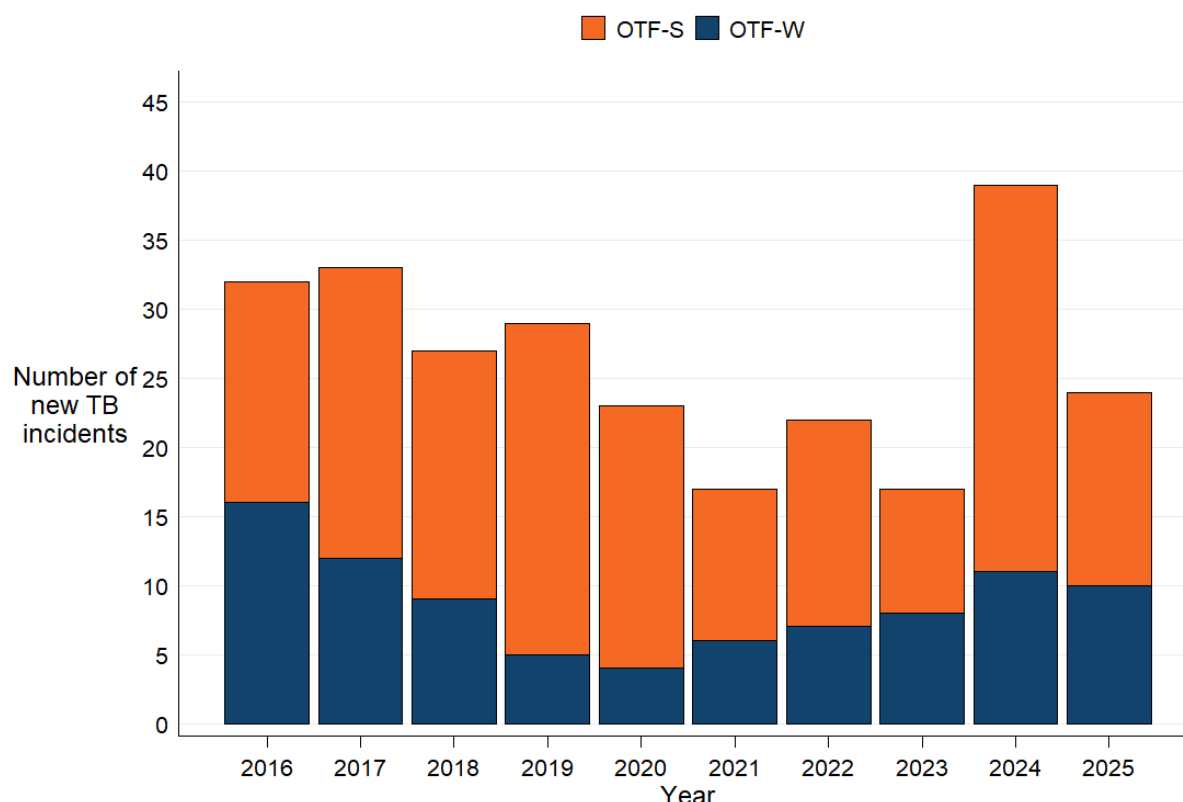


Figure 2: Annual number of new TB incidents in Cumbria from 2016 to 2025.

Disclosing TB surveillance method

Targeted surveillance tests conducted around holdings affected by OTF-W incidents (commonly known as radial or 'RAD' tests) was the most common disclosing test type in Cumbria, identifying 11 new incidents in 2025 (Figure 3). Four incidents were detected by routine herd tests (which are conducted every 4 years in the LRA), 3 incidents by 6-monthly (post-incident) herd testing (6M tests), and 2 incidents each were disclosed by hotspot testing and pre-movement testing. Herd testing conducted 12 months after the conclusion of a TB incident (12M tests) and slaughterhouse surveillance (routine post-mortem meat inspection of carcasses) identified one new herd incident each.

Compared to 2024, there was a substantial decrease in the number of incidents detected by hotspot testing (15 incidents in 2024 vs 2 incidents in 2025). This happened despite the fact that herd testing frequencies were not reduced in the 2 active TB hotspots (although all herds in HS21 could continue to become eligible for annual testing as has been the case since 2023).

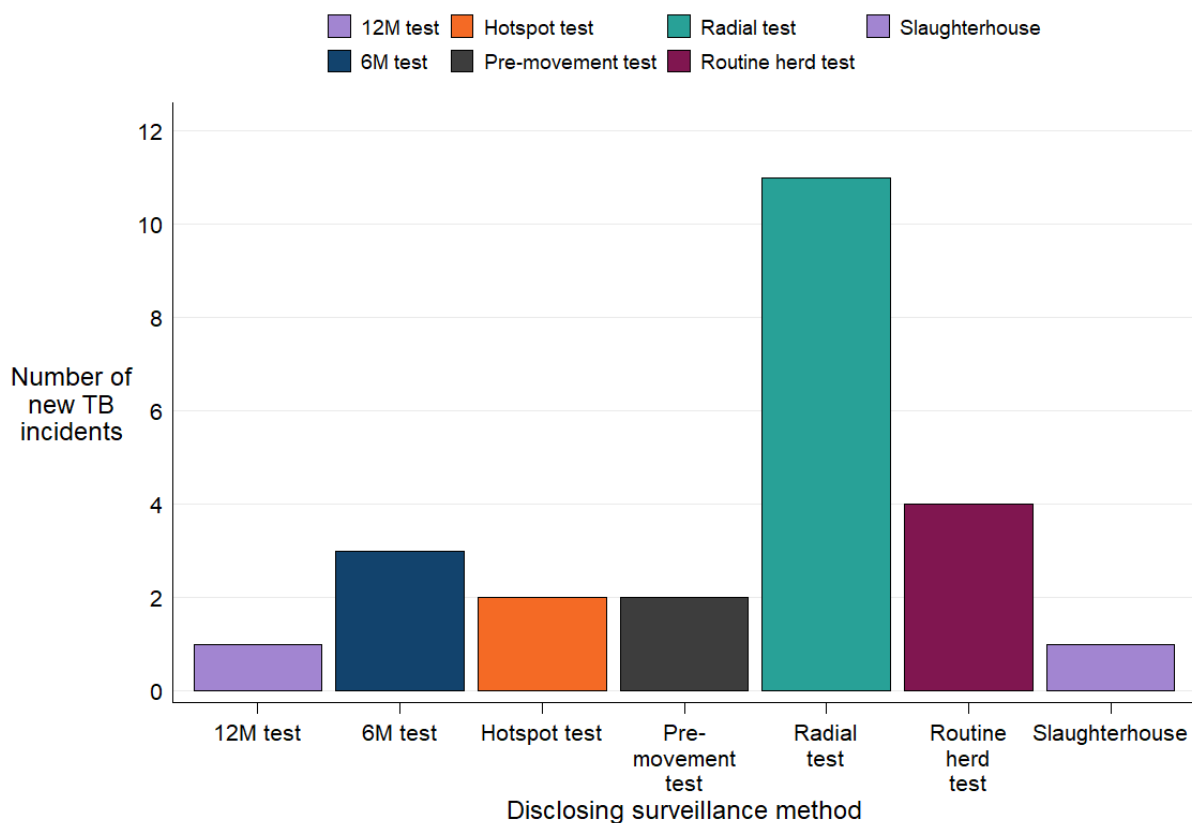


Figure 3: Number of new TB incidents (OTF-W and OTF-S) in Cumbria in 2025, according to the surveillance methods that detected them.

Duration of TB incidents

During 2025, 30 incidents were resolved across Cumbria. Eleven of those started in 2025, 18 started in 2024 and one started in 2023 (Figure 4).

Of the 13 OTF-W incidents that ended in 2025, 3 were resolved within 101 and 150 days, 5 within 151 and 240 days, 4 within 241 and 550 days, one lasted more than 550 days (classified as persistent OTF-W incident).

Of the 17 OTF-S incidents, 6 were resolved quickly within 100 days, 5 within 101 and 150 days, 4 within 151 and 240 days and 2 within 241 and 550 days.

There were 13 incidents ongoing at the end of 2025 (6 OTF-W and 7 OTF-S), compared with 19 ongoing incidents at the end of 2024.

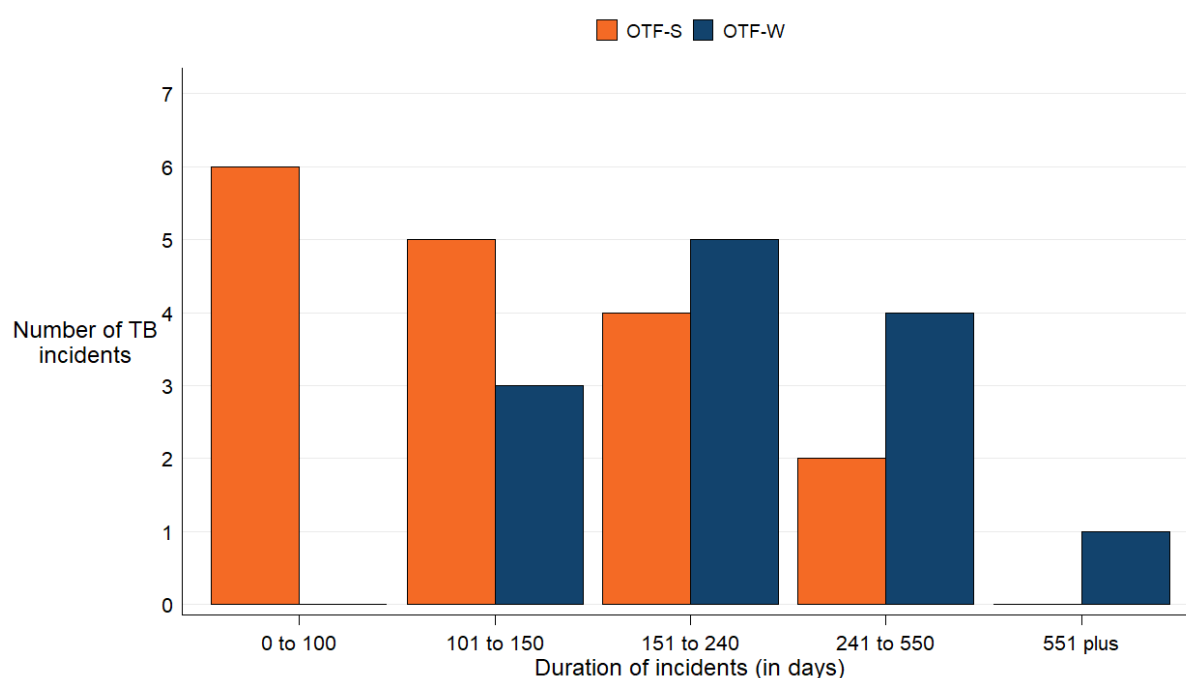


Figure 4: Duration of TB incidents (OTF-W and OTF-S) that closed in Cumbria in 2025.

Skin test reactors and interferon gamma test positive animals removed

During 2025, a total of 266 cattle were removed as TB test reactors from incident herds in Cumbria, a 2.2% decrease on the 272 animals removed in 2024 (Figure 5). Of these, 71 were skin test reactors (108 in 2024) and 195 were positive to the supplementary interferon gamma blood test (IFN- γ) (164 in 2024).

The annual number of skin test reactors detected showed a decreasing trend from 2016 (107) to 2022 (28). In 2023, the number of skin reactors increased to its highest

ever level (128), this is likely to be associated with the escalation of disease in HS29 during this time. Since 2023, the number of skin reactors has been declining again.

The number of IFN- γ reactors showed an increasing trend between 2016 and 2018 when it reached the highest recorded level (225). This is likely to be associated with the disease picture and enhanced testing in HS21. Following this, there was a declining trend from 2019 until 2022. There was a marked increase in 2023 to (142), followed by a more gradual increase over the subsequent years in 2024 and 2025. The initial increase is likely to be influenced by the disease picture and enhanced cattle testing programme in HS29. However, in 2025 this was influenced to a greater extent by the occurrence of OTF-W incidents outside the hotspots.

There were 4 incidents that contributed significantly to the number of reactors removed in 2025:

- An explosive incident disclosed in the south-west of the county. A total of 37 reactors were removed from this farm of 150 cattle in 2025. This included 26 IFN- γ test and 11 skin reactors. Visible lesions of TB were identified in 29 of these reactors. There were also 2 slaughterhouse cases. Whole Genome Sequencing (WGS) clade B3-11 of *M. bovis* was isolated and it was found to be closely related to isolates in HS29 (2 single nucleotide polymorphisms, SNPs), but no epidemiological links could be found with that hotspot.
- An explosive incident in the south-east of the county. There were 58 test reactors removed from a dairy herd of approximately 330 cattle. These included 9 skin reactors, 21 IFN- γ test reactors, 15 flexi-IFN- γ test reactors and 13 IDEXX test-positive animals. Two of the reactors had visible lesions at post-mortem and WGS clade B6-23 of *M. bovis* was isolated. This was found to be closely related to isolates from historic incidents in HS21 but there had been no cattle movements out of HS21 into the affected herd in the preceding 10 years. However, some historic moves out of the hotspot onto neighbouring farms were identified. The farm had sustained a previous OTF-S incident in 2024.
- A total of 28 skin test reactors were removed from an OTF-S incident in a dairy herd of approximately 239 cattle in the south-east of the county. None of the cattle removed had visible lesions of TB and *M. bovis* could not be identified by laboratory testing. The farm had had a previous OTF-S incident in 2023, which ended in 2024. The incident was finally resolved later in 2025 through the application of the Non-Specific Reactor (NSR) exceptional procedure.
- An OTF-W incident in the centre of HS29 (north-east of Penrith) which started in 2024 had 52 IFN- γ test reactors removed in 2025, 2 of which had visible lesions. Only 3 skin test reactors were disclosed over the course of the incident. *M. bovis* clade B3-11 was isolated and found to be highly related to other isolates from HS29. The affected farm had a dairy herd with 1250 cattle and had previously experienced an OTF-W incident which started in November 2022 and resolved in April 2023.

In addition to the supplementary IFN- γ blood test, additional supplementary blood testing was also carried out in 3 incidents:

- APHA authorised supplementary private Enferplex TB antibody testing towards the end of an explosive TB incident in a dairy herd to the west of Wigton. The incident had been resolved through statutory repeat skin testing and several rounds of government-funded IFN-gamma and IDEXX testing, but the affected farmer and private vet were looking to further reduce the risk of residual *M. bovis* infection in cattle before the herd regained OTF status.
- Discretionary flexible-extended IFN- γ and IDEXX blood testing was utilised in an incident south-east of Kendal, as there was a concern about youngstock being affected by *M. bovis*.
- Private Actiphage testing was utilised in the above-mentioned herd in the south-east of the county that experienced a complex OTF-S incident subsequently resolved by the NSR procedure.

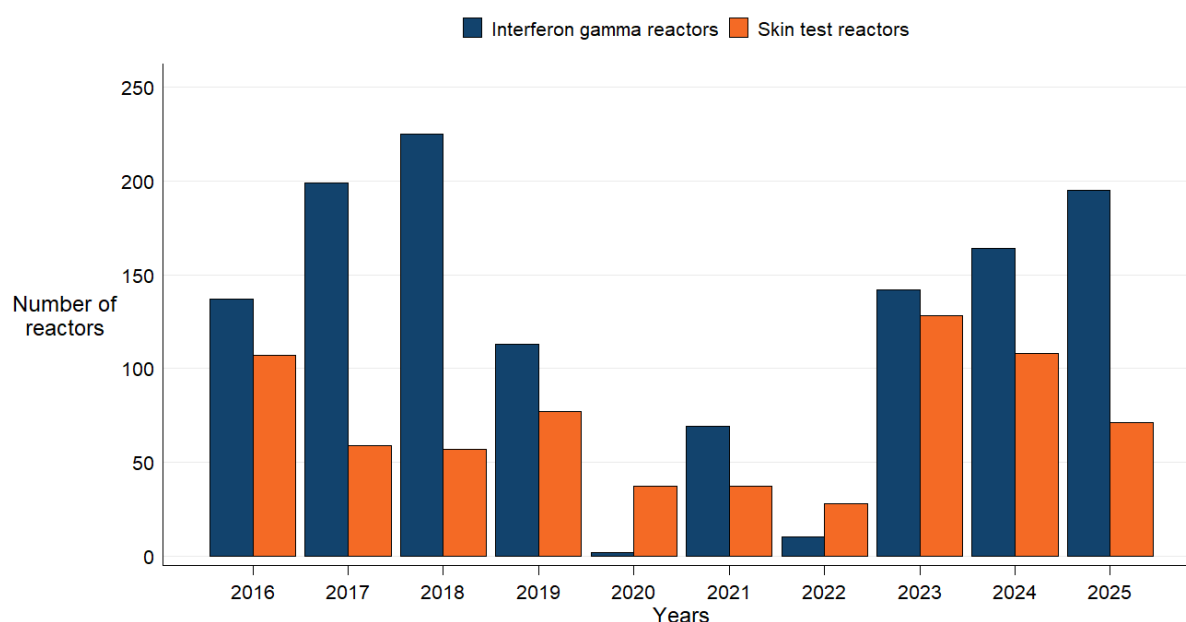


Figure 5: Number of skin test reactors and IFN- γ test positive cattle removed by APHA for TB control reasons in Cumbria from 2016 to 2025.

Recurrent TB incidents

Three-year recurrence

Of the 10 herds with an OTF-W incident in 2025, one had experienced another TB incident in the previous 3 years (Figure 6). Of the 14 herds with a new OTF-S TB incident, 4 (29%) had experienced another TB incident in the previous 3 years. Two of these recurrent OTF-S incidents were in Hotspot 21 (HS21) and one was in the HS21/HS29 overlap area. One of these was likely attributable to residual infection in the herd, but the risk pathways were unclear for the other 2. Supplementary IFN- γ

blood testing is not routinely deployed for OTF-S incidents but can be used on a discretionary basis for these incidents in TB hotspot areas.

Cumbria had the second highest overall percentage of recurrent herd incidents in the LRA (21%), which was higher than the average for the LRA (19%). However, this should be considered in light of the actual number of affected herds and only constitutes 5 incidents. The lowest overall percentage of recurrent herd incidents in the LRA was in the North East of England (0%), followed by Lincolnshire (5%) Yorkshire and Humberside (13%) and the North West (14%). The South East (34%) had the highest overall percentage of recurrent herd incidents in the LRA.

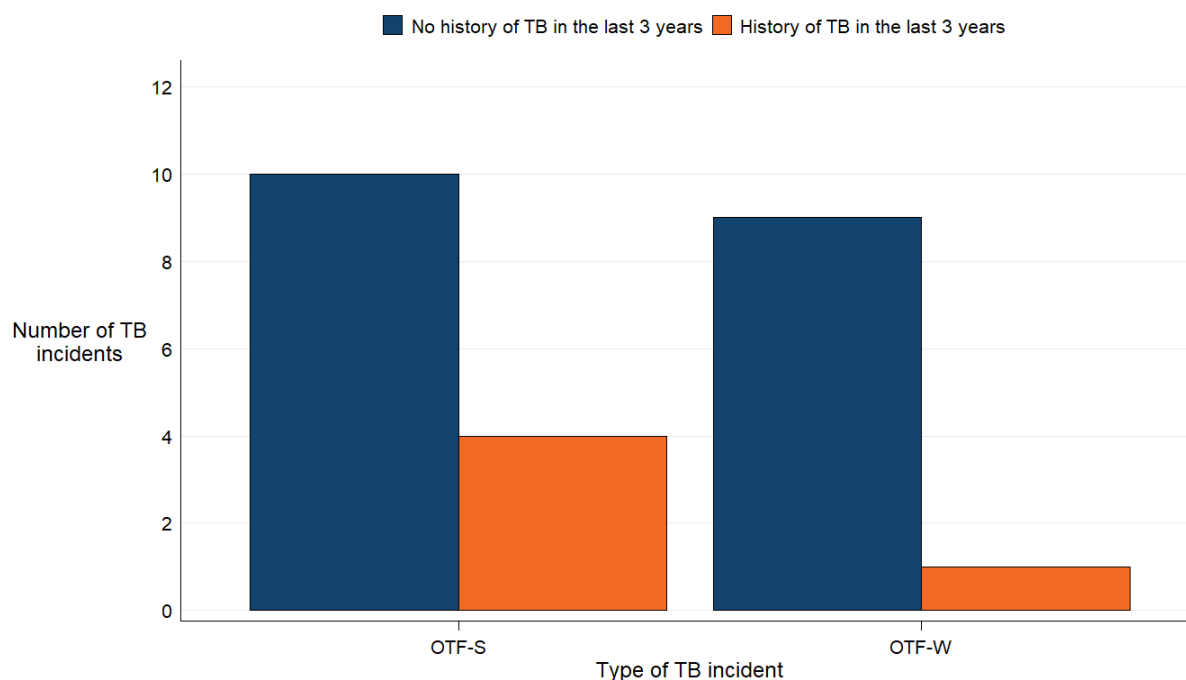


Figure 6: Number of herds with a TB incident (by OTF-W and OTF-S) in Cumbria in 2025, with and without a history of any TB incident in the previous 3 years of the disclosing test.

Geographical distribution of TB incidents

In 2025, the 2 active hotspot areas in the county (HS21 and HS29) contributed relatively fewer incidents, whereas the areas of high cattle density outside those hotspots sustained more incidents. Of the 10 new OTF-W incidents, there were none in the hotspots, 9 within current areas of concern and one just to the west of HS29.

There are 3 current areas of concern:

- area of the Cumbrian peninsulas, especially around Broughton-in-Furness in south Cumbria
- area to the east and south of Kendal in south Cumbria running down and over the border into Lancashire
- area between Wigton and Carlisle in North Cumbria

Area of concern 1: area of the Cumbrian peninsulas, especially around Broughton-in-Furness in South Cumbria

Two OTF-W incidents occurred on contiguous farms near Broughton-in-Furness (incidents 296 and 792, Figure 7). Both yielded B3-11 isolates which were closely genetically related to each other. These isolates were also genetically similar to isolates from HS29 incidents. Disease investigation found no obvious cause or link between this area and HS29 and at the time of writing it was unknown how this clade of *M. bovis* came to be in the south-west of Cumbria. There was also one OTF-S incident in this location. There is concern about local spread of *M. bovis* infection around Broughton-in-Furness.

To the east and south of these 2 incidents, there were a further 3 OTF-W incidents. One yielded clade B6-11 (incident 244, Figure 7), one yielded clade B6-84 (incident 586, Figure 7) and for the third, the clade is unknown (incident 97, Figure 7). Clade B6-11 of *M. bovis* is one of the most common in GB, with a homorange spanning the west of England, from South Cheshire to Avon and Wiltshire, and parts of Wales. Clade B6-84 originates in Ireland. There was also one OTF-S incident in this area. There had been previous OTF-W incidents in this location during 2018 and 2019. Three of these were attributable to a different clade (B3-11) and the other 2 did not yield a clade. This area is less concerning than the area around Broughton-in-Furness.

There was a further OTF-S incident in the western extremity of the peninsulas.

Area of concern 2: area to the east and south of Kendal in South Cumbria running down and over the border into Lancashire

There were 2 OTF-W incidents in this area, these were part of an expansive cluster of 2025 incidents which also included 5 OTF-S incidents. One of the OTF-W incidents was due to infection with WGS clade B5-11 (incident 302, Figure 7), which originates in Ireland. The other (incident 798, Figure 7) was associated with WGS clade B6-23, which although originates from Ireland, was also the clade isolated from incidents in HS21. The isolate from this incident was related to historic isolates from HS21 but cattle movements from HS21 onto the affected farm could not be identified. However, there were some historic movements from HS21 onto neighbouring herds.

One of the OTF-S incidents in this southern cluster was resolved using the NSR procedure.

This cluster to the south of Kendal potentially extends over the border into Lancashire. There were 4 OTF-S incidents in this area of northern Lancashire in 2025.

Previously, in 2024, there was 1 OTF-W incident in the south of Cumbria and 2 OTF-W in the north of Lancashire. There were 8 OTF-S incidents in South Cumbria and 5 OTF-S incidents in northern Lancashire. The whole area is being closely monitored as an area of concern.

Area of concern 3: area between Wigton and Carlisle in North Cumbria

There were 2 OTF-W incidents detected in the north of Cumbria: one caused by clade B6-23 (incident 26, Figure 7) of *M. bovis* and the other by clade B6-84 (incident 362, Figure 7). B6-23 originates from Ireland but was also the clade associated with HS21. WGS information was not available for this isolate, so it was not possible to determine its more likely origin. Similarly, B6-84 originates in Ireland. There was also one new OTF-S incident (incident 646, Figure 7) in this area, it had previously had an OTF-W incident in 2024 which yielded clade B6-23. The isolate was found to be closely related to isolates from Ireland rather than to HS21 isolates.

There was also another OTF-W incident in this area in 2024 which yielded clade B6-86 (originates in Ireland) and a 2023 OTF-W incident which yielded B6-62 homerange predominantly in central and southern England.

Therefore, in a small geographical area between Carlisle and Wigton there were 5 OTF-W incidents between 2023 and 2025 with 4 different clades isolated. Three of these clades have origins in Ireland (B6-23, B6-84 and B6-86). It is unfortunate that the genetic relationship between the 2 B6-23 isolates could not be determined but otherwise this variety of clades does not support presence of locally spreading disease. However, it does raise a concern about the regularity of animals with undetected *M. bovis* infection being brought into the area. All 4 of the incidents (3 in 2025 and 1 in 2024) were disclosed following radial testing generated by the 2023 incident. This raises concern that these new incursions would go undetected had there not been a radial surveillance zone in place. This part of North Cumbria has been designated an area of concern due to the apparent pressure from purchased infection.

OTF-W to west of HS29

The tenth OTF-W incident was disclosed just to the west of HS29 (incident 283, Figure 7). Clade B3-11 was isolated and found to be closely related to isolates from incidents within HS29. This was the second OTF-W incident in this area. The previous one started in 2024 and also yielded a B3-11 isolate which was closely related to isolates from HS29. Following the annual review of TB hotspots in the LRA, HS29 was subsequently expanded in 2026 to include the area where these incidents occurred.

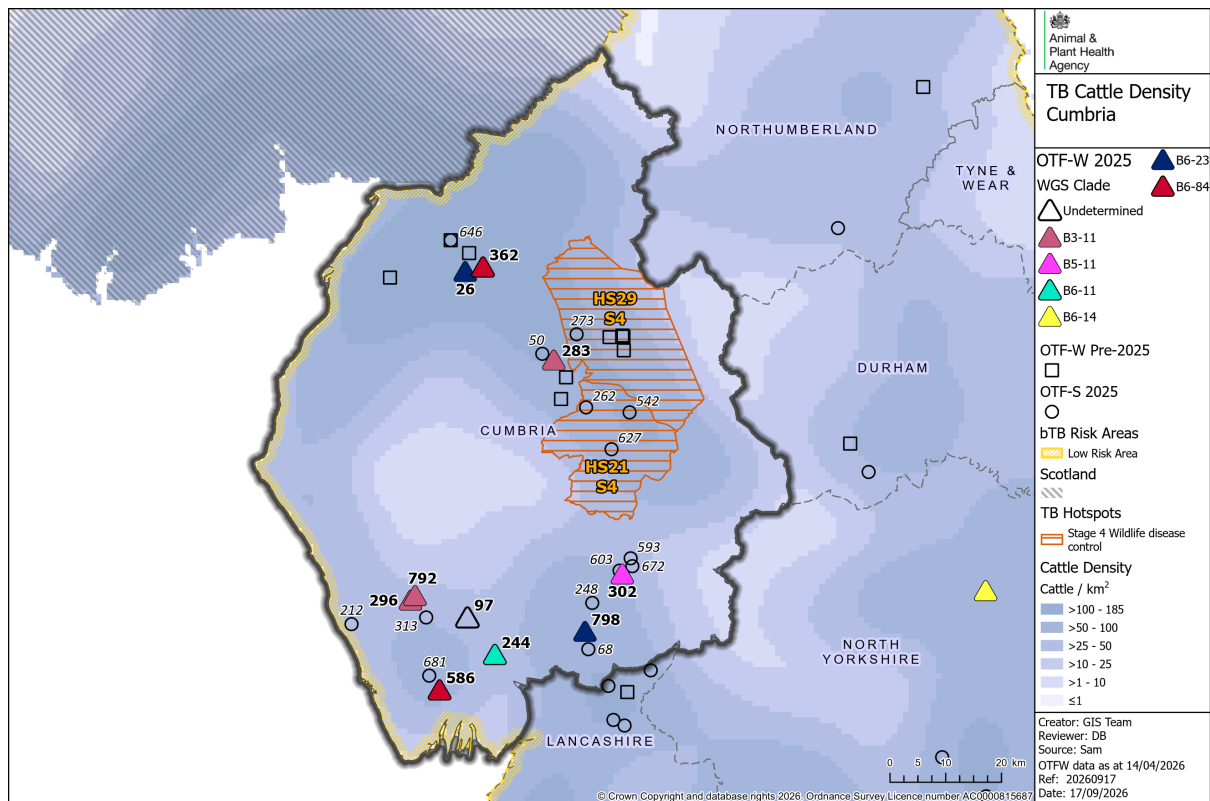


Figure 7: Location of cattle holdings in Cumbria with new TB incidents (OTF-W and OTF-S) in 2025, and cattle incident holdings with pre-2025 OTF-W incidents still ongoing at the beginning of 2025, overlaid on a cattle density map (as in 2024).

Figure 7 description: A map of Cumbria and adjoining areas showing the cattle density (as in 2024), the geographical location of cattle holdings with new TB incidents (OTF-W shown as triangles and OTF-S shown as circles) in 2025, and cattle holdings with OTF-W incidents still ongoing at the beginning of 2025, shown as squares. The 2025 OTF-W incidents are coloured by WGS clade. Navy blue represents clade B6-23, dusky pink represents clade B3-11, bright pink represents clade B5-11, light green represents clade B6-11, bright yellow represents clade B6-14, red represents clade B6-84, and transparent triangles represent incidents where the WGS clade was undetermined. Dark blue areas represent higher cattle density and light blue represent lower cattle density. TB hotspots areas are shown with hashed lines. The colour of the hotspot, along with its suffix, indicates the stage of controls in place in 2025: dark orange is stage 4 (S4 is wildlife disease control). The locations of new TB incidents are described in the main text.

Figure 8 displays the hotspot areas and radial surveillance zones around OTF-W incidents that were active, pending, completed or not instigated in Cumbria during 2025 (green circles), as well as radial zones active or completed in 2021 to 2024 (other circles). In 2025, new active radial zones were set up in various locations around the county, corresponding with the occurrence of new OTF-W incidents. Notably, there was one new radial zone to the west of HS29 (incident 283 in the map). Consistent with patterns observed in 2024, 2 new OTF-W incidents began in 2025 in the north of the county, leading to radial zones being set up there (incidents 26 and 362 on the map). There were 7 new radial zones established in the south of

the county during 2025. One was located just north of Sedbergh (incident 302 on the map) and one south of Kendal (incident 798 on the map). The remaining 5 were in the Furness area. One of the incidents triggering a radial zone was located within the area which used to be HS26, but this incident yielded clade B6-11 which was not the same clade that triggered HS26 (B3-11).

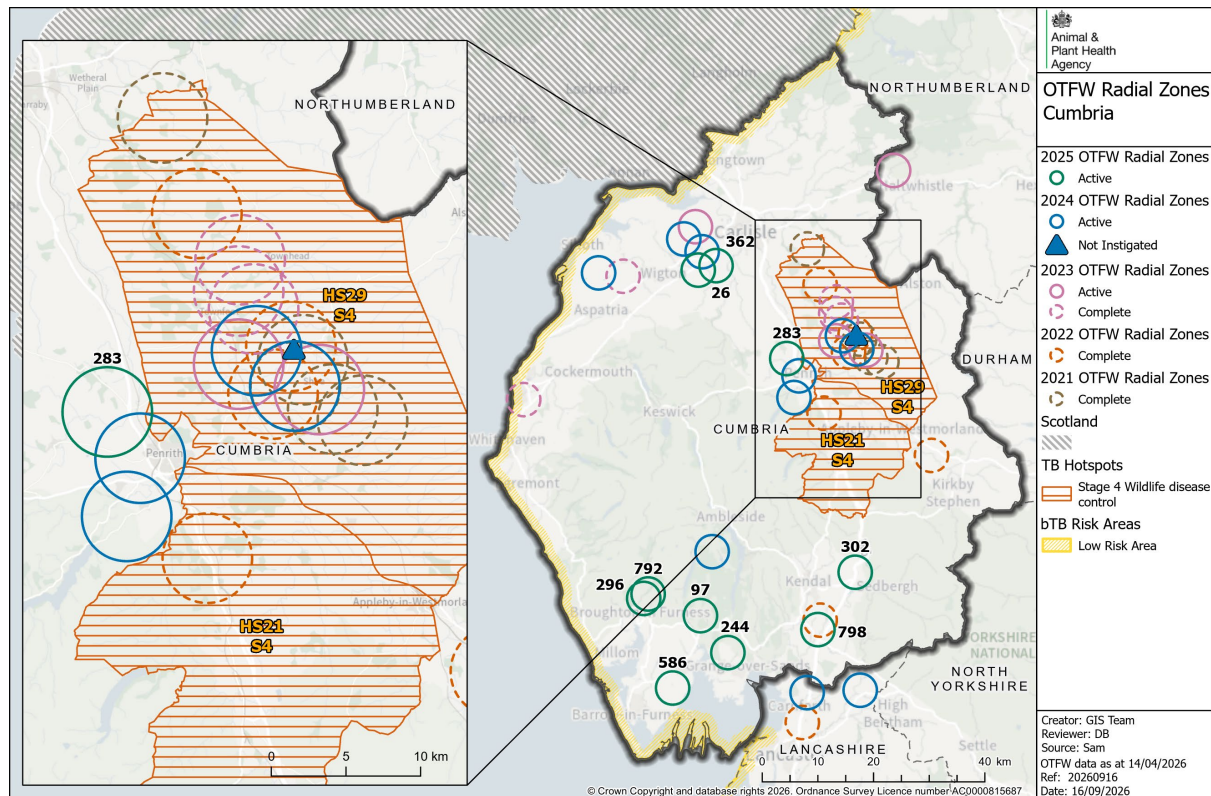


Figure 8: Hotspot areas and radial surveillance zones around OTF-W incidents that were active, completed or not instigated in Cumbria during 2025, by year of initiation.

Figure 8 description: A map of Cumbria and adjoining areas showing the geographical location of hotspots and radial surveillance zones around OTF-W incidents in 2025. The active radial zones are shown as solid line circles, completed radial zones are shown as dotted line circles. The colour of the circles represents the year in which the radial zone was instigated: 2025 is green, 2024 is blue, 2023 is pink, 2022 is orange, and 2021 is brown. The geographical location of TB hotspots is shown with hashed lines. The colour of the hotspot, along with the suffixes, indicates the stage of controls in place in 2025: dark orange is stage 4 (S4 is wildlife disease control). Incidents in the adjacent Edge Area counties are not shown on this map.

Main risk pathways and key drivers for TB infection

In 2025, all (100%) new TB incidents in Cumbria received a preliminary or final APHA veterinary investigation (Disease Report Form or 'DRF') to identify the likely source of infection. The top 3 potential drivers of TB incidents are listed below, and the tabulated summary of identified risk pathways from these investigations and the subsequent calculated weighted contribution are given in Appendix 3.

Details of the protocol used for these investigations, and the subsequent methodology used to calculate the weighted contribution of the different suspected sources of *M. bovis* infection can be found in the [explanatory supplement for the annual reports 2025](#).

The top 3 potential drivers of the occurrence of TB in cattle in Cumbria during 2025 were:

- movements of undetected infected cattle
- contiguous cattle infection
- residual cattle infection

The infection risk pathway for cattle herds in 2025 with the highest calculated weighted contribution from APHA veterinary investigations is movement of undetected, infected cattle into (and within) Cumbria (40.6%, Appendix 3). This is exemplified by 5 of the 10 OTF-W incidents yielding a different clade. The calculated weighted contribution for this pathway was higher compared to previous years, 2024 (24.9%) and 2023 (18.5%) and this is likely to be influenced by there being just 2 incidents in HS29 in 2025 compared to 13 in 2024 when the epidemiology of this hotspot involved a wildlife reservoir.

Contiguous cattle infection has a weighted contribution of 10.2%, which although slightly higher than in recent years (9.1% in 2024, 8.3% in 2023), remained similar.

Residual cattle infection had a weighted contribution of 8.1%, which was higher compared to recent years (5.0% in 2024, 3.3% in 2023).

There was a degree of uncertainty around the source of some new incidents. Other or unknown sources had a weighted contribution of 27.1%. For the purpose of reflecting uncertainty in the overall picture, this pathway may be ascribed additional weighting where there is low certainty (such as 'possible' or 'likely') within other pathways. This was higher than in previous years, 25.0% in 2024 and 13.2% in 2023.

As displayed in Figure 9 and Appendix 3 (Table 5), new OTF-W incidents in 2025 were attributed to a variety of sources of infection. Five incidents were attributed to the introduction of undetected, infected cattle. Two of these incidents were located south-west of Carlisle (incidents 26 and 362 on the map). One was located to the west of HS29 (incident 283 on the map) and the remaining 2 in the south of the region (incidents 586 and 792 on the map). Two incidents were attributed to local

cattle sources, these were both in the south of the county. The source of infection for 3 incidents (all in the south) was unknown.

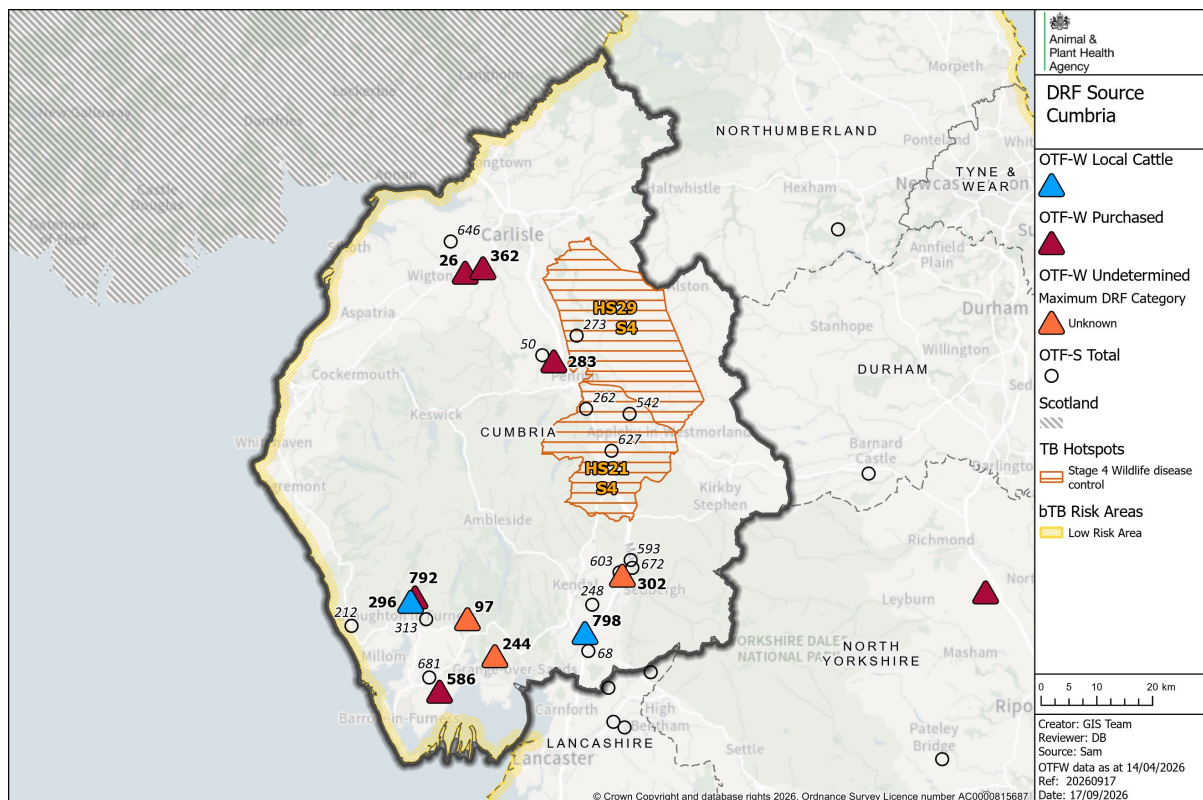


Figure 9: Map of the source of infection pathway recorded with the highest level of certainty, for OTF-W incidents, and the location of OTF-S incidents in Cumbria which started in 2025.

Figure 9 description: A map of Cumbria and adjoining areas showing the geographical location of cattle holdings with new OTF-W incidents in 2025 and the most likely source of infection. OTF-W incidents are shown as triangles in different colours which represent the source of infection with the highest level of certainty. Local cattle refers to residual infection and contiguous cattle risk pathways (shown as blue triangles). Purchased refers to cattle movement risk pathways (shown as red triangles). Incidents with an undetermined pathway (shown as orange triangles) refer to incidents where a likely source of infection could not be ascertained. New OTF-S incidents in 2025 are shown as circles. The geographical location of TB hotspots is shown with hashed lines. The colour of the hotspot, along with the suffixes, indicates the stage of controls in place in 2025: dark orange is stage 4 (S4 is wildlife disease control). OTF-W incidents in the adjacent Edge Area counties are shown as small black triangles and OTF-S incidents as small white circles.

TB hotspots

In this report the number of incidents per year in each Hotspot has been gathered using field veterinarian data. Previously, spatial Geographic Information System (GIS) data was used to inform whether an incident was inside of a designated Hotspot. This change may create discrepancies between the number of incidents per year reported here, compared to previous reports.

Furthermore, incidents shown on the maps (Figures 7 to 9) are point located at the centre of their County Parish Holding number (CPH). Incidents discussed in this section may also include holdings which are point located outside the boundary, but with land inside the hotspot boundary.

There were 2 hotspots active in Cumbria at the start of 2025: Hotspot 21 (HS21) and Hotspot 29 (HS29).

Further details on TB hotspots in the [Low Risk Area of England](#) can be found following the link.

Hotspot 21

HS21 was established in 2016 to the south and east of Penrith, following detection of a cluster of cattle TB incidents associated with clade B6-23 (formerly genotype 17:z) of *M. bovis*. The same clade of *M. bovis* was subsequently identified in found dead badger carcasses in the centre of the hotspot area.

All herds in this hotspot were originally subject to 6-monthly testing, but this has been eased since 2020 and an increasing number of herds could become eligible for annual testing, determined by their geography and subject to the following criteria:

- 6 years clear of TB incidents
- not within a radial zone (within 3 kilometres of an OTF-W holding)
- have received a TB Advisory Service (TBAS) visit

Since October 2023, all farms in HS21 have been eligible to move to annual testing subject to those criteria.

No new OTF-W incidents were detected within HS21 in 2025, as in the 2 previous years. Three new OTF-S incidents were detected in 2025 (incidents 262, 542 and 627, Figure 7) and all were recurrent. One of those was in the HS21/HS29 overlap (Figure 7). There were 3 less OTF-S incidents compared to 2024 (Figure 10).

Following several consecutive years of successful licensed badger population control in much of HS21 (see the link provided above), infected badgers are no longer considered to be playing a role in the epidemiology of this hotspot. Further work was commissioned to understand the persistence of OTF-S incidents and inform further actions.

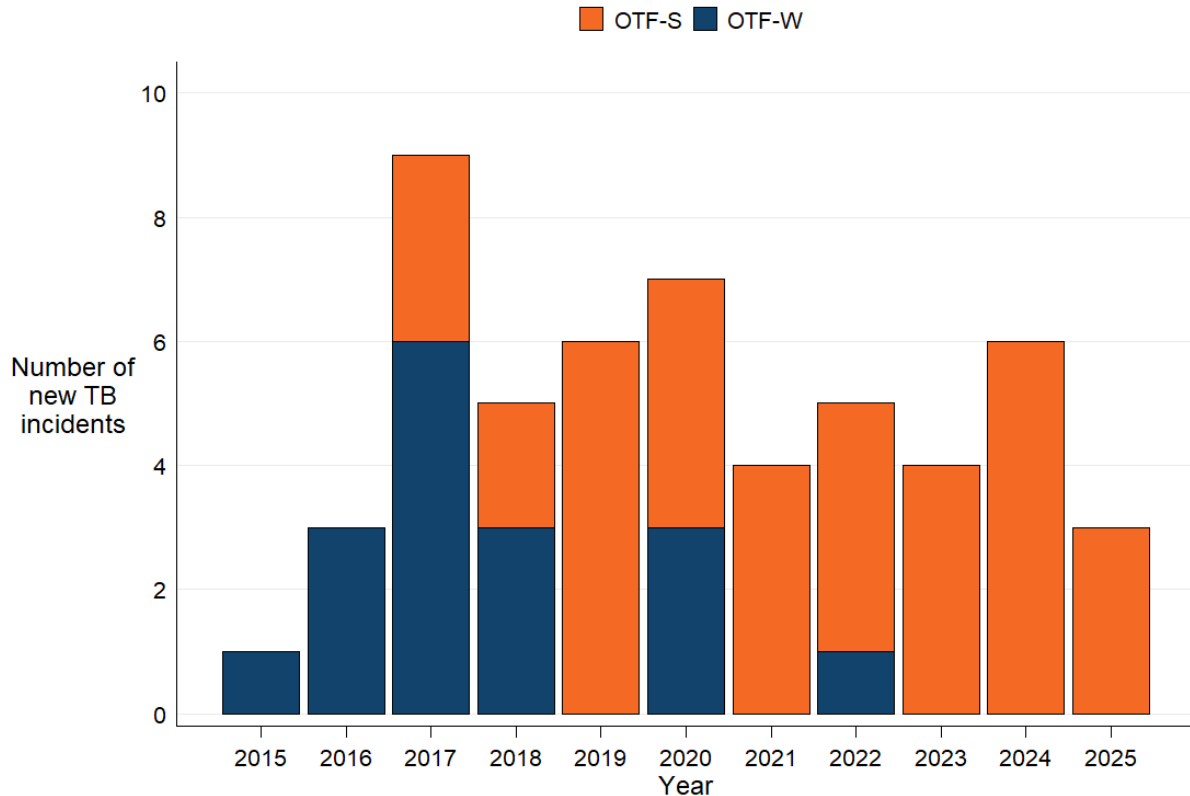


Figure 10: Annual number of new TB incidents detected in HS21, from 2015 to 2025.

Hotspot 29

HS29 was established in 2022 following detection of a cluster of cattle TB incidents associated with clade B3-11 (formerly genotype 25:a) of *M. bovis*. It spans an area to the east of Penrith and overlaps with HS21 to the south. Herds in HS29 are subject to 6-monthly testing.

In 2025 no new OTF-W incidents were detected within HS29 (down from 4 in 2024). There were 2 new OTF-S incidents, a substantial decrease compared to 9 in 2024 (Figure 11). The sharp reduction in the number of incidents in HS29 in 2025 was very encouraging and reflected the rigorous implementation of cattle and wildlife controls.

From establishment of the hotspot to 31 December 2025, a total of 49 badger and 8 wild deer carcasses have been submitted. Seven *M. bovis*-positive badger carcasses were identified across 2023, 2024 and 2025, genetically related to the local cattle incidents.

Badger culling operations were licensed and began within HS29 in September 2024 and continued in 2025. 175 badgers were removed from the cull area. Of the carcasses that underwent post-mortem examination (PME) in 2025, 1 (1/173, 0.6% [95% CI 0.0, 1.7]) was positive for *M. bovis* across the whole area. This represents a reduction in *M. bovis*-positive carcasses from 5.3% in 2024 (24/449).

A Defra-funded Local Ownership Group has been established in the area with the aim of improving knowledge of disease and uptake of biosecurity measures. It comprises of local stakeholder including cattle keepers, private vets and National Farmers' Union (NFU).

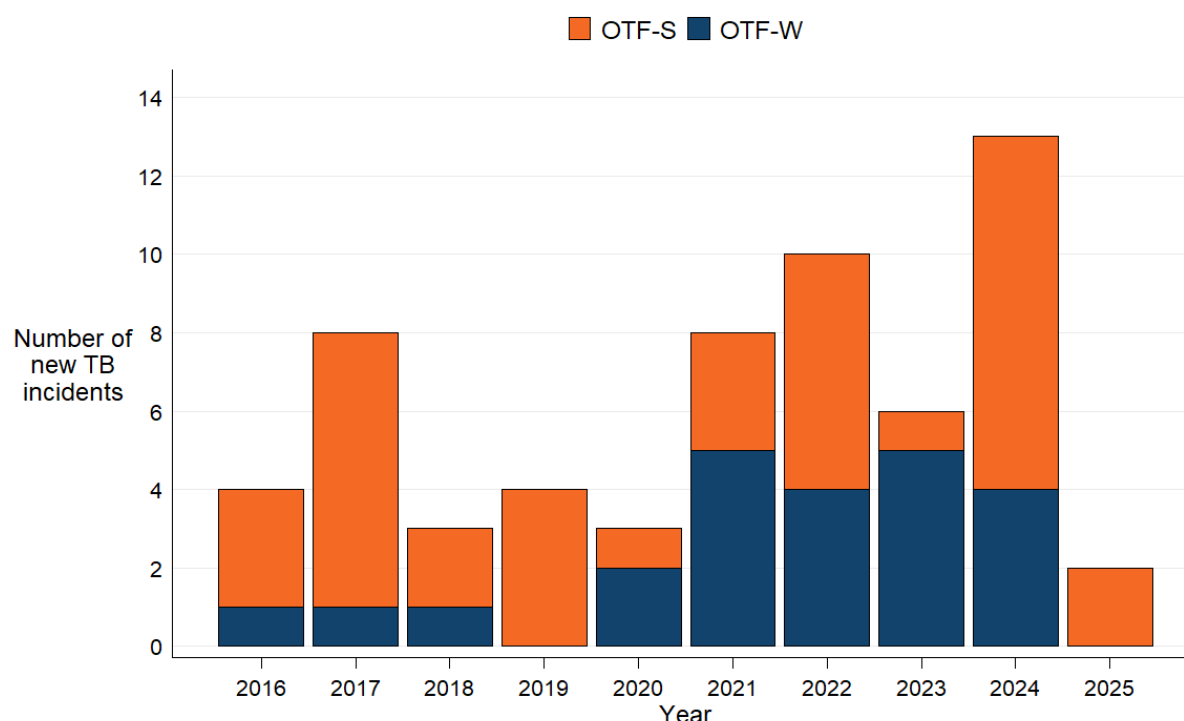


Figure 11: Annual number of new TB incidents detected in HS29, from 2016 to 2025.

Forward look

The TB situation in Cumbria showed some improvement during 2025, with a welcome reduction in the total number of new incidents (24) compared to 2024 (39). The county had been experiencing a declining trend between 2016 and 2023, however the number of incidents in 2024 was the highest recorded in the county over the 10-year period 2016 to 2025. This peak was primarily driven by HS29 and since enhanced TB surveillance and controls have been implemented here in both cattle and badgers, it is hoped that yearly new incidents will continue to decline and eventually return to previous levels.

However, the most concerning element of the 2025 data was the occurrence of the 10 new OTF-W incidents outside the hotspot areas, together with the introduction of 5 different clades. This shows that Cumbria remains under significant pressure from the introduction of undetected infected cattle and at risk of developing new hotspot areas following infection spillover from cattle to susceptible local wildlife. As such, 3 'areas of concern' have been designated. This provides a framework for monitoring and consideration of enhanced measures.

As discussed in the 2024 annual report, the concern about the role of clades originating in Ireland remains. Direct imports onto the affected farms have not been identified and this implies the potential role of intermediate holdings, including those in Scotland.

Current control measures, including radial surveillance, continue to play a key role in detecting infection, with a substantial proportion of incidents disclosed through this surveillance stream. This is illustrated by the North Cumbria cluster where in the absence of radial testing, infections may have gone undetected until the next routine herd test.

Looking ahead, achieving Officially Tuberculosis Free (OTF) status for Cumbria by 2038 remains a realistic but challenging objective. Continued progress will be underpinned by 3 key elements:

- Concerted effort amongst the farming community to exercise due diligence in purchasing practices, supported by advice from private vets, other advisers and using tools available to them such as the [ibTB](#) interactive mapping application, which is now searchable by eartag. This should be coupled with continued efforts to enhance farm biosecurity to minimise the possibility of direct and indirect cattle and wildlife interactions and thus preventing spillover of disease from cattle into wildlife which can result in hotspot situations.
- Careful monitoring of existing and emerging areas of concern together with implementation of enhanced measures where this is considered appropriate. Local flexibility in approach is underpinned by the recent TB Strategy Refresh.
- Continued collaboration with cattle farmers, private vets and other local stakeholders in TB hotspots to ensure that the excellent progress made is not undermined by new incursions into those areas. APHA regularly reviews these areas and will continue to adapt the enhanced TB control measures in response to changes in the local epidemiological picture.

Appendix 1: cattle industry demographics

Table 1: Number (and percentage of total) of active cattle herds on the last day of the reporting year by herd type in Cumbria.

Source: Sam

Breed purpose	2023	2024	2025
Beef	2,208 (69%)	2,215 (69%)	2,162 (69%)
Dairy	861 (27%)	858 (27%)	856 (27%)
Other	76 (2%)	79 (2.5%)	89 (3%)
Undetermined*	55 (2%)	50 (1.5%)	34 (1%)
Total	3,200	3,202	3,141

* Undetermined herd type herds are those are for which a herd type record is not available in Sam.

Table 2: Number of active herds on the last day of the reporting year in Cumbria by herd size and herd type (dairy, beef, other and undetermined), between 2023 and 2025. Sources: Herds and herd type data from Sam, herd size data from RADAR (as of 31 December each year).

Year	Herd size	Beef	Dairy	Other	Undetermined	Total
2023	0	365	54	41	10	470
2023	1 to 50	859	67	19	41	986
2023	51 to 100	423	69	9	1	502
2023	101 to 200	376	173	3	1	553
2023	201 to 350	131	216	4	0	351
2023	351 to 500	29	137	0	0	166
2023	Greater than 500	25	145	0	2	172
2023	Total	2,208	861	76	55	3,200
2024	0	414	54	40	16	524
2024	1 to 50	865	66	21	30	982
2024	51 to 100	403	72	9	1	485
2024	101 to 200	357	170	6	1	534
2024	201 to 350	127	217	2	0	346
2024	351 to 500	26	134	0	0	160
2024	Greater than 500	23	145	1	2	171
2024	Total	2,215	858	79	50	3,202
2025	0	373	56	49	8	486
2025	1 to 50	874	78	23	20	995
2025	51 to 100	398	73	7	2	480
2025	101 to 200	331	161	5	1	498
2025	201 to 350	130	206	4	1	341
2025	351 to 500	30	123	0	1	154
2025	Greater than 500	26	159	1	1	187
2025	Total	2,162	856	89	34	3,141

Appendix 2: summary of headline cattle TB statistics

Table 3: Herd-level summary statistics for TB in cattle in Cumbria between 2023 and 2025.

Source: Sam

Herd-level statistics	2023	2024	2025
(a) Total number of cattle herds live on Sam at the end of the reporting period	3,200	3,202	3,141
(b) Total number of cattle herds subject to annual TB testing (or more frequent) at the end of the reporting period (any reason)	538	828	982
(c) Total number of whole herd skin tests carried out at any time in the period	1,299	1,674	1,695
(d) Total number of OTF cattle herds having TB whole-herd tests during the period for any reason	1,073	1,158	1,291
(e) Total number of OTF cattle herds at the end of the report period (herds not under any type of TB movement restrictions)	3,118	3,089	3,045
(f) Total number of cattle herds that were not under restrictions due to an ongoing TB incident at the end of the report period	3,137	3,132	3,093
(g.1) Total number of new OTF-S TB incidents detected in cattle herds during the report period	9	28	14
(g.2) Total number of new OTF-W TB incidents detected in cattle herds during the report period	8	11	10

Herd-level statistics	2023	2024	2025
(g.3) Total number of new TB incidents detected in cattle herds during the report period	17	39	24
(h.1) Of the new OTF-W herd incidents, how many occurred in a holding affected by another OTF-W incident in the previous 3 years?	1	3	1
(h.2) Of the new OTF-W herd incidents, how many could be considered secondary to a primary incident based on current evidence?	5	2	3
(h.3) Of the new OTF-W herd incidents, how many were triggered by skin test reactors or twice-inconclusive reactors (2xIRs) at routine herd tests?	1	1	2
(h.4) Of the new OTF-W herd incidents, how many were triggered by skin test reactors or 2xIRs at other TB test types (such as forward and back-tracings, contiguous, check tests)?	7	10	8
(h.5) Of the new OTF-W herd incidents, how many were first detected through routine slaughterhouse TB surveillance?	1	0	1
(i.1) Number of new OTF-S incidents revealed by enhanced TB surveillance (radial testing) conducted around those OTF-W herds	2	8	6
(i.2) Number of new OTF-W incidents revealed by enhanced TB surveillance (radial testing) conducted around those OTF-W herds	4	5	5

Herd-level statistics	2023	2024	2025
(j) Number of OTF-W herds still open at the end of the period (including any ongoing OTF-W incidents that began in a previous reporting period)	4	9	6
(k) Number of OTF-W herds still open at the end of the period that were on a finishing unit	1	1	1
(l) New laboratory-confirmed incidents of M. bovis infection in non-bovine domestic species or captive deer detected during the report period (indicate host species involved)	0	0	0

Table 4: Animal-level summary statistics for TB in cattle in Cumbria between 2023 and 2025.

Source: Sam

Animal-level statistics (cattle)	2023	2024	2025
(a.1) Number of cattle tested with tuberculin skin tests in the period	220,237	332,010	332,887
(a.2) Number of cattle tested with additional IFN- γ blood tests in the period	4,673	4,312	4,474
(a.3) Total number of cattle tested with tuberculin skin tests or additional IFN- γ blood tests in the period (animal tests)	224,910	337,365	337,658
(b.1) Reactors detected by tuberculin skin tests during the year	128	108	71
(b.2) Reactors detected by additional IFN- γ blood tests (skin-test negative or IR animals) during the year	142	164	195
(c) Reactors detected during year per incidents disclosed during year	15.88	6.97	11.08
(d) Reactors per 1,000 animal tests	1.20	0.81	0.79
(e.1) Additional animals slaughtered during the year for TB control reasons (dangerous contacts, including any first time IRs)	8	15	20
(e.2) Additional animals slaughtered during the year for TB control reasons (private slaughters)	0	2	2
(f) Slaughterhouse (SLH) cases (tuberculous carcasses) reported by the	7	9	9

Animal-level statistics (cattle)	2023	2024	2025
Food Standards Agency (FSA) during routine meat inspection			
(g) SLH cases confirmed by M. bovis PCR testing or bacteriological culture	1	0	2

Note (a.3) The total number of cattle tested may be lower than the sum of the numbers reported in (a.1) and (a.2), as some cattle may have undergone both a tuberculin skin test and an additional IFN- γ blood test and are counted only once in (a.3).

Note (c) Reactors detected during year per incidents disclosed during year, reactors may be from incidents disclosed in earlier years, as any found through testing during the report year count in the table above.

Note (g) SLH cases confirmed by culture of M. bovis, not all cases reported are submitted for laboratory analysis. All cases reported are from any period prior to or during restrictions.

Appendix 3: suspected sources of M. bovis infection for all the new OTF-W and OTF-S incidents identified in the report period

In 2025, 24 (100%) new TB incidents in Cumbria received a preliminary or final APHA veterinary investigation to identify the source of infection.

Each TB incident could have up to 3 potential risk pathways identified. Each risk pathway is given a score that reflects the likelihood of that pathway bringing TB into the herd. The score is recorded as either:

- definite (score 8)
- most likely (score 6)
- likely (score 4)
- possible (score 1)

The sources for each incident are weighted by the certainty ascribed. Any combination of definite, most likely, likely, or possible can contribute towards the overall picture for possible routes of introduction into a herd. If the overall score for a herd is less than 6, then the score is made up to 6 using the 'Other or unknown source' option. Buffering up to 6 in this way helps to reflect the uncertainty in assessments where only 'likely' or 'possible' sources are identified.

Table 5 combines the data from multiple herds and provides the proportion of pathways in which each source was identified, weighted by the certainty that each source caused the introduction of TB. The output does not show the proportion of herds where each pathway was identified (this is skewed by the certainty calculation). WGS of M. bovis isolates can be a powerful tool in identifying a likely source of infection, however WGS clades are not determined for OTF-S herds. As a result of varying levels of uncertainty, only broad generalisations should be made from these data. A more detailed description of this methodology is provided in the [explanatory supplement for the annual reports 2025](#).

Table 5: Suspected sources of M. bovis infection for the 24 incidents with a preliminary or a final veterinary assessment in Cumbria, in 2025.

Source of infection	Possible (1)	Likely (4)	Most likely (6)	Definite (8)	Weighted contribution
Badgers	6	0	0	0	3.8%
Cattle movements	9	10	3	0	40.6%
Contiguous	9	2	0	0	10.2%
Residual cattle infection	4	0	2	0	8.1%
Domestic animals	1	0	0	0	0.7%
Non-specific reactor	0	0	1	0	3.6%
Fomites	6	0	0	0	4.0%
Other wildlife	3	0	0	0	2.1%
Other or unknown source*	4	0	0	0	27.1%

Please note that each TB incident could have up to 3 potential pathways so totals may not equate to the number of actual incidents that have occurred.

* For the purpose of reflecting uncertainty in the overall picture, this pathway may be ascribed additional weighting where there is low certainty (such as 'possible' or 'likely') within other pathways.



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