

Low TB Area – Frequently Asked Questions

What is the current situation in the Low TB Area, and how have we got to this position?

Numbers of new TB breakdowns have consistently remained very low in the Low TB Area over many years. However, evidence has been emerging of an increasing number of new TB incidents in localised areas of the Low TB Area, known as TB hotspots. The key recent finding is that these new incidents have been locally linked. Measures are now needed to address this emerging issue quickly.

For many years, new incidents in the Low TB Area have been considered to be mainly of purchased origin, with records of cattle movement from an area of higher TB incidence. Until now, the test and cull of infected cattle approach has largely dealt with these isolated incidents, preventing wider spread in the area and longer duration TB breakdowns.

However, there is now epidemiological evidence of breakdowns in these hotspot areas sharing an identical, or similar genetic strain of *Mycobacterium bovis* (*M. bovis*), the bovine TB bacteria, indicating local disease spread. In addition, local cattle movements and other close business relationships have been identified linking some of these breakdowns together. The introduction is likely to have been a movement from a higher risk TB area causing a new TB breakdown in 2017 and disease spreading from there.

The two TB hotspot areas identified are around Denbighshire and the Conwy Valley and a smaller area around Pennal. TB progression in the hotspot area around Denbighshire and the Conwy Valley appears to be more advanced than the area around Pennal. There is concern that the Denbighshire/ Conwy Valley area will become as advanced as the picture in CL7/CL8 spatial units in the ITBAN, unless these issues are addressed proactively now.

What measures are being put in place to address the increase in disease?

In response to this emerging disease situation and to protect the long-term health status of the Low TB Area, a number of new measures are to be introduced in a phased approach between 1 June and Autumn 2021.

Measures already introduced in June 2021

Measure 1: Introduce testing at severe interpretation from the beginning of a TB breakdown, with an exit strategy of using additional blood testing on animals with a severe inconclusive reactor (IR) status, when a herd test has only identified severe IRs. Two clear tests will be needed to lift TB restrictions.

Aim: To increase the likelihood of identifying infected animals at an earlier stage and reduce the likelihood of infected animals remaining in the herd at the end of the breakdown

Measure 2: In the event of a clear surveillance test (e.g. an annual Whole Herd Test in your herd), animals which have shown a positive reaction to bovine tuberculin and have an out-of-herd ear tag number will be identified subsequently for additional blood testing by APHA. In the event of a positive test result your herd will be placed under TB movement restrictions and one clear herd test will be needed at standard interpretation to lift the restrictions.
Aim: To identify infected purchased animals at an earlier stage by using more sensitive additional testing.

Measure 3: In herds with a recurrent breakdown within 6 months of the closure of a previous breakdown, that is not considered to be purchased in origin, an Action Plan will be implemented by an APHA case vet for a step by step approach to help control and eradicate bovine TB from your herd. Your private vet (at your expense) can be involved in the meeting with APHA if you so choose.

Aim: Breakdowns occurring soon after the closure of a herd breakdown can be an indication that disease is becoming established in the herd, or that the herd can tighten up it's TB controls to ensure added protection against the introduction of new disease.

A **summary of the measures** to be introduced, an indication as to which area the measures will apply in and an expected timeline for introduction are included in the table below. As you can see two of the measures will apply across Wales. The measures are explained in more detail further in the document:

Measures applicable in each area	Introduction date (expected)	Denbighshire / Conwy (Applies - Yes/No)	Pennal (Applies - Yes/No)	All Wales (Applies - Yes/No)
Incident herds				
1. Severe interpretation from incident start and gamma testing exit	Introduced in June 2021	Yes	Yes	No
2. Interferon-gamma and IDEXX testing of IRs	Autumn 2021	Yes	Yes	Persistent incidents (> 18 months) duration) only
3. OTFW by default	Autumn 2021	Yes	Yes	Yes
4. Three Year rule withdrawn	Autumn 2021	Yes	Yes	Yes
5. Biosecurity advice in incidents	Autumn 2021	Yes	Yes	Persistent incidents (> 18 months) only
Contiguous (neighbouring and incident) and post-incident holdings				
6. Additional Contiguous 6 month tests	To be introduced in November 2021	Yes	Yes	No
7. Contiguous Test, 6M and 12M	Autumn 2021	Yes	Yes	No

tests at severe interpretation					
Recurrent incidents at the 6-month post-incident test (not purchased origin)					
8. Action Plan requirements	Introduced in June 2021		Yes	Yes	Persistent & recurrent to the 6 month test after a persistent incident
Officially TB Free herds					
9. Move spatial units into ITBAN – premovement testing	To be introduced in November 2021		Yes	No	N/A
10. More sensitive supplementary blood testing for higher risk animals	Introduced in June 2021		Yes	Yes	No
11. Cymorth “Keep It Out” in contiguous holdings	To be introduced in November 2021		Yes	Yes	No

Measures in detail

These include additional measures for:

- Holdings that are experiencing a TB incident
- Holdings neighbouring a TB incident (contiguous herds) and those that have follow-up testing in the 18 months after a TB incident.
- Holdings that are experiencing a recurrent TB incident up to and including a test 6 months after an incident closes, which isn't considered to be due to purchase.
- Officially TB Free holdings (OTF)

The measures are aimed at increasing the sensitivity of cattle testing and ensuring additional biosecurity advice is provided.

Why don't these measures include any measures for badgers? Has badger activity contributed to the spread of the disease in these areas?

To date all the indications are that the increase in TB in these areas is cattle associated/related.

As yet, there has been no evidence of bovine TB infection in the local badger population in the Low TB Area hotspots and only very low numbers of positive badgers found in the ITBAN, from surveillance of dead badgers, although we do

continue to monitor this situation closely and strongly encourage keepers to report dead badgers for post-mortem examination.

Future measures on surveillance or actions concerning wildlife will be considered as part of any future proposals for wildlife in Wales.

If you find a dead badger, please report as follows;

phone: 0808 1695110

e-mail: badger@bfd.wales

website: www.bfd.wales

Why is the sensitivity of cattle testing being increased?

M.bovis is a difficult organism to detect. There is no single test, or combination of tests available that has 100% specificity i.e. detects no false positives and 100% sensitivity i.e. detects all TB infected animals. By using additional blood tests, such as the Interferon-gamma test (termed the “gamma test”) and the IDEXX antibody test (termed the “IDEXX test”) and by using severe interpretation of the skin test, the risk of missing infected cattle is minimised.

How does severe interpretation of the skin test compare with standard interpretation?

In the UK the skin test is used as a comparative test, where both avian tuberculin and bovine tuberculin are injected into the neck of a bovine animal and any reaction to the tuberculin read by measurement of skin thickness at the injection sites 72 hours later:

- *Standard interpretation* – usually used for surveillance testing, and in TB incidents depending on the herd’s previous testing results. It is highly specific at 99.98% (only 1 in 5000 uninfected animals tested are likely to show a false positive result), but is less sensitive. On average the test is likely to detect 81% of infected animals (range 50%-90%).
- *Severe interpretation* – in this interpretation of the test, where there is an increased likelihood TB is present, the threshold for passing the test is raised. Severe interpretation lowers specificity to 99.91% (9 in 10,000 uninfected animals tested are likely to be identified as false positives), but the test is more sensitive. On average reading the test at severe interpretation is likely to detect 85% of infected animals (range 78-91%).

From June 1st 2021, severe interpretation has been applied in all breakdown tests in Officially TB Free Withdrawn (OTFW) herds, throughout a TB breakdown.

In Autumn 2021, all TB breakdowns disclosed through skin tests due to the finding of reactors, or unresolved IRs, will become OTFW by default and so on severe interpretation of the skin test throughout the breakdown.

A measure being introduced in Autumn 2021 will mean contiguous tests (CON) and post-breakdown tests (6M,12M) will also be at severe interpretation. CON6 and CON12 tests will remain at standard interpretation.

What additional measures are being introduced into herds experiencing a TB incident in the affected area?

Aim: Our aim in these high risk herds is:

- i. To detect infected animals early and to minimise the likelihood of infected animals remaining at the end of an incident.
- ii. To introduce a biosecurity advice element to APHA incident management. This is aimed at highlighting potential on-farm risks to TB control, such as feeding of raw milk, boundaries with neighbouring cattle, protection of feed stores and water sources, the storage and application of slurry and manure and the cleansing and disinfection of feed and water troughs and buildings.

Measures:

- *Severe interpretation from incident start and gamma testing exit* – in OTFW breakdowns, the herd will be tested at severe interpretation throughout the incident. When only inconclusive reactors (IRs) at severe interpretation are detected in a herd test, these animals will receive a gamma test (and an IDEXX test, if no positives to the gamma test are detected). This is the exit strategy. Herds need two clear tests before removal of restrictions.
- *Interferon-gamma and IDEXX testing of IRs* - all IRs during the incident will be tested with a gamma and IDEXX test. IRs are considered as potentially high risk animals.
- *OTFW by default* - all herds with a TB incident disclosed through the skin test, due to reactors or unresolved IRs will require at least two clear tests to become Officially TB Free (OTF). This measure is termed “Officially TB Free Withdrawn [OTFW] by default”. This measure does not apply to incidents starting with a positive supplementary gamma and/or IDEXX antibody test in the ITBAN/Low TB Area hotspot areas, or to slaughterhouse cases pending further investigation.
- *Three Year rule withdrawn* - all herds with an IR only at a surveillance test will remain under TB restrictions, until the IR has been retested. Previously herds with only IRs at a surveillance test and with no confirmed TB history in the last three years had their whole herd TB restrictions released pending the retest of the restricted IR. The problem with this policy is that release of herd restrictions has led to multiple movements from some premises that have needed to be traced and tested after the IR has become positive on a retest.
- *Biosecurity advice in incidents* - introduce an extended biosecurity advisory element to the Disease Report Form visit, to include an assessment similar to the Action Plan assessment, with a standard follow-up letter.

What additional measures are being introduced in holdings neighbouring a TB incident (contiguous incidents) and those that have follow-up testing in the 18 months after a TB incident?

Aims:

- i. Complete more regular herd tests in those herds neighbouring a TB incident, considered to be at higher risk of TB spread.

- ii. Increase the sensitivity of those tests by using severe interpretation
- iii. Increase the sensitivity of post-breakdown tests (6M and 12M tests) by using severe interpretation. Herds that have had an incident in the previous 18 months are considered at greater risk of a new TB incident than any other herd.

Measures:

- *Additional Contiguous 6 month tests* - additional testing has already been introduced in the ITBAN in herds neighbouring a TB incident (contiguous herds). The regime is an immediate Contiguous Test, followed by one 6 months later (CON6), one 6 months after that (CON6) and one 12 months later (CON12). This regime is being included in the Low Area TB hotspots.
- *Contiguous Test, 6M and 12M tests at severe interpretation* - use severe interpretation in contiguous tests (CON) and post-breakdown tests i.e. 6M and 12M tests, but not in CON6 and CON12 tests.

What additional measures are being introduced in holdings that are experiencing a recurrent TB incident up to and including a test 6 months after an incident closes, which is not considered to be due to purchase?

Aims: Recurrent breakdowns can be an indication that TB has not been resolved at the end of the previous TB incident. The aim is to treat these herds in the same way as a persistent TB incident.

Measures:

- *Action Plan requirements* - introduce Action Plan measures in these recurrent incidents. These include an assessment of biosecurity on farm, severe interpretation of the skin test from the beginning of a breakdown with the exit strategy, the application of separate intra-holding TB restrictions for land/buildings over 3km from the main premises, the removal of standard IRs and the gamma and IDEXX testing of severe IRs. No trap and test wildlife operations will be deployed.

What additional measures are being introduced in holdings that are Officially TB Free holdings (OTF)?

Aims:

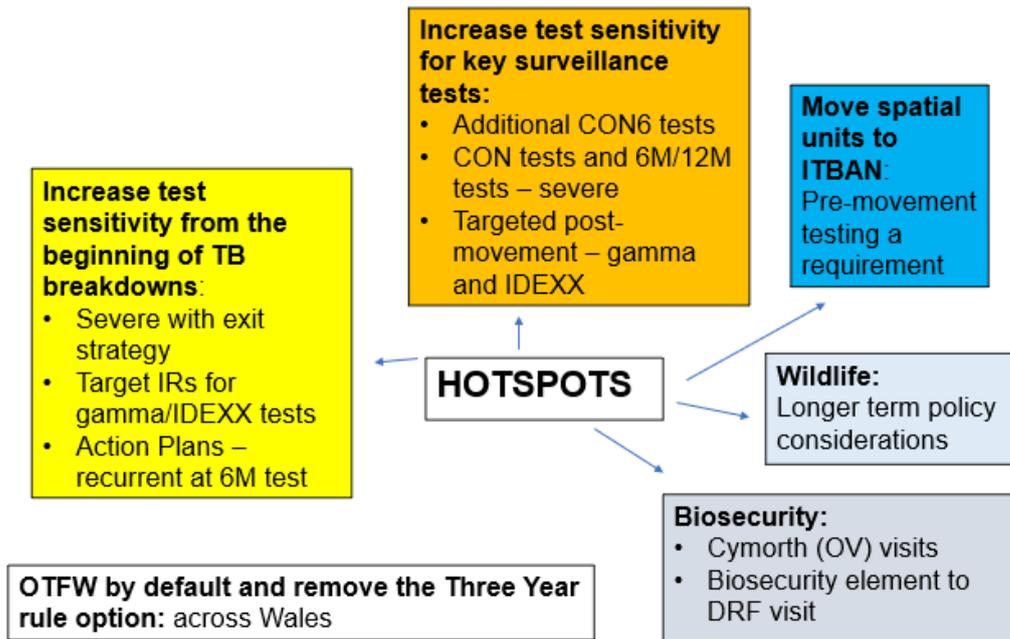
- i. As local movements are now appearing to contribute to disease spread in Low TB Area hotspot areas, there is a need to introduce pre-movement testing to prevent infection being moved around between herds locally. We can introduce this under the current legislation in the highest risk areas of Denbighshire and Conwy Valley by temporarily moving the affected spatial units into a higher risk TB status area i.e. to the ITBAN. The drawback in this approach is that a requirement for private post-movement testing is lost.

- ii. To identify infected animals that have been introduced into a herd by targeting higher risk animals in clear testing herds with more sensitive blood tests. Our evidence shows that, in some cases, an infected animal can remain undetected in a herd for many years after purchase.

Measures:

- *Move spatial units into ITBAN – premovement testing* - spatial Units GW1, CL1 and CL2 along the North Wales coast will be moved into the Intermediate TB Area on 1st November 2021. Until the date of introduction of this measure, current rules for pre-movement and post-movement testing apply, i.e. as for a Low TB Area. After introduction of this measure, all cattle of 42 days and over leaving the holding will require a pre-movement test. There are exceptions to this e.g. animals destined for slaughter. A post-movement test, will not be required for cattle moving onto a farm in this area from anywhere in Wales, England, Scotland, or N.Ireland. However, farmer's purchasing animals from higher risk areas are still able to privately test these animals, if they so wish, after getting permission from APHA.
- *More sensitive supplementary blood testing for higher risk animals* – introduce more sensitive additional supplementary blood testing in holdings with a clear surveillance test by using the gamma and IDEXX tests in higher risk animals with both a positive reaction to bovine tuberculin and an out-of-herd ear number. A positive result to one or both of these tests will result in movement restrictions being applied and a requirement for a single clear skin test at standard interpretation before movement restrictions are revoked. The breakdown becomes OTFW, if additional animals are identified as reactors in the skin test, or at VLW discretion in exceptional cases. A surveillance test, which only has IRs means the test is not clear until the IRs have been retested. If there are reactors following the retest, the herd is in a breakdown. If the IRs test clear, then animals with an out-of-herd ear number and a bovine positive reaction (including the IRs) will be scheduled by APHA for a gamma and IDEXX test. No IDEXX test will be completed on animals that have not had a skin test within 10-30 days.
- *Cymorth “Keep It Out” in contiguous holdings* - Cymorth “Keep It Out” visits from the keeper's vet are being offered to keepers of holdings neighbouring a TB incident in the ITBAN. This will be replicated in Low TB Area hotspot areas

SUMMARY



Why are these changes necessary?

These measures are to be introduced without undue delay to enable early detection of disease through increased and more sensitive surveillance testing, more sensitive breakdown testing to prevent disease becoming established in the cattle and wildlife populations, and to improve biosecurity on farms in these areas, in order to stamp-out the disease vigorously before it becomes endemic.

When will these measures end?

The impact of the implementation of these measures will be reviewed regularly and will be amended based on epidemiological evidence and advice.

How will I know what spatial unit relates to my holding?

In the longer term Data Map Wales will provide the information you need. However, in the meantime, please visit the [TB Testing Interval](#) website in GOV.UK, where you can check the Spatial Unit for your parish in the [parish list](#) and the [TB Testing interval search tool](#). Additionally, please refer to the map within the Low TB Area section of our Bovine TB webpage.

What is the definition of a hotspot?

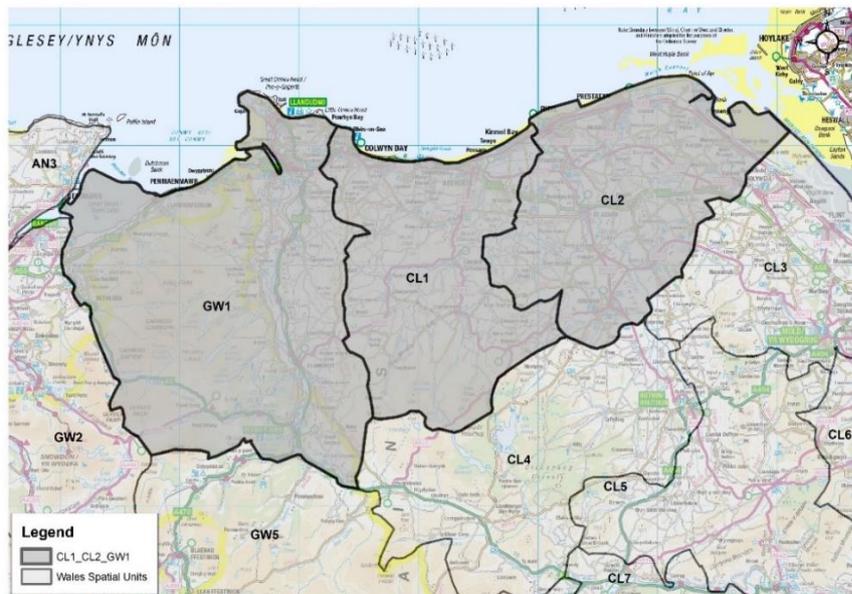
Localised spikes in TB incidence can occur anywhere across Wales, but the term hotspot is being used more specifically to include areas of more sustained TB incidence (number of new incidents), or prevalence (number of open incidents at any one time) in the Low TB Area, or Intermediate TB Areas, where the genetic strain of

M.bovis has been identified as the same, or very similar and there are indications of local disease transmission.

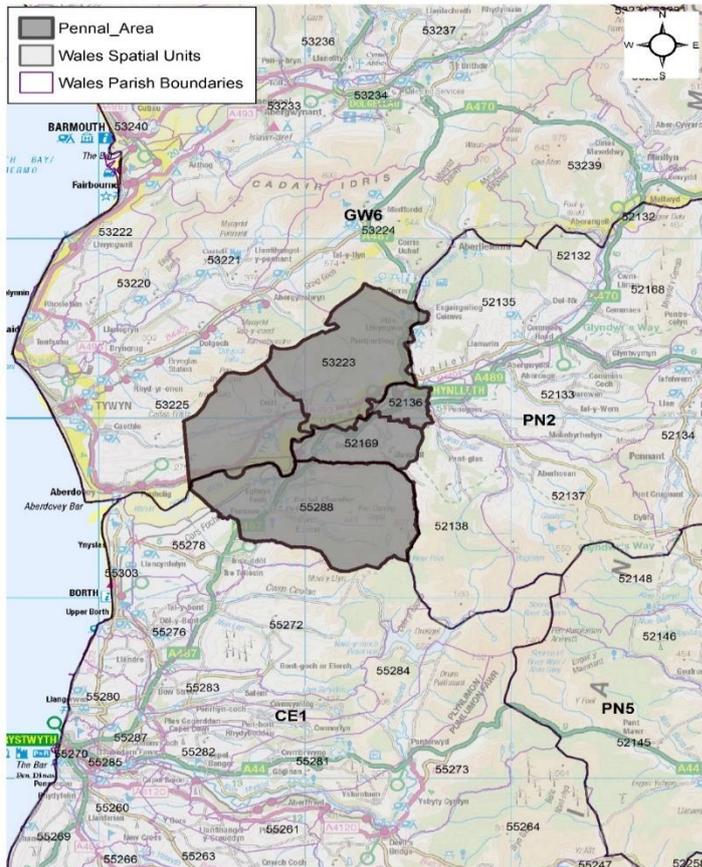
What is a spatial unit?

Wales is divided into separate spatial units for TB epidemiological purposes, with a **spatial unit** being an area comprised of whole parishes. Each spatial unit was of a similar size in terms of numbers of herds when originally established (225 herds).

Highlighted in dark grey: Denbighshire and Conwy Valley:



Highlighted in Dark Grey: Pennal area



As a farmer, how can I reduce the risk of moving infected cattle into the Low TB Area when sourcing replacements?

It is important to make informed decisions regarding from where you source replacement stock- www.ibtb.co.uk can be used to help you assess the TB risk of cattle, should you need to buy in. Ensure isolation and post movement testing has been carried out before mixing any purchased cattle with the resident herd. Discuss plans to purchase replacement stock with your vet.

Does this mean the end for the Low TB Area, and the regionalised approach?

Our objective remains the same, we are determined to get on top of this emerging disease situation in the Low TB Area to ensure it stays on track to be declared Officially TB Free in the not so distant future.

We established the TB eradication programme to work towards our long-term goal of A TB Free Wales. In 2017 we implemented a [refreshed programme](#), key to which was establishing a regionalised approach to ensure tailored measures could be implemented in each of the low, medium and high risk TB regions. To supplement this approach targets were set for eradication in each of the TB Areas. These areas are under constant review and targeted changes to disease control measures will be implemented as and when appropriate.

Eligibility for pre-movement tests relating to calves under or over 42 days

Cattle, which are 42 days of age and older require a pre-movement test, when pre-movement test requirements apply

What does this mean for the TB Eradication strategy?

We have seen good progress towards eradication since we established the programme in 2008, with long term decreases in new incidents and prevalence. During 2020 we saw the lowest number of new incidents in a calendar year since 2002. At the end of December 2020, 94.6% of herds in Wales were TB free.

A regionalised approach to TB eradication has been in since 2017, enabling measures tailored to addressing the varying risks and disease drivers in each TB Area. This is an example of our regionalised approach, aimed at protecting the Low TB Area.

What does this mean for the TB eradication targets for Wales?

TB eradication targets for Wales and interim targets for each TB region were announced in December 2017 – which, if achieved, will see Wales become officially TB free between 2036 and 2041.

We have seen good progress towards eradication since we established the TB Eradication programme in 2008, with long term decreases in new incidents and prevalence.

We can only achieve our targets with co-operation and dedication from all parties involved in our TB Eradication Programme. We all need to work together to make progress.

We continue to review the data on an annual basis as we approach the second half of the first interquartile targets published in our [eradication target plan](#).

What engagement have you had with industry about this issue and the changes?

A letter has been sent to all affected farms within the areas to alert farmers of these changes. We engaged with Official Veterinarians and also communicated these measures with stakeholders, TB Eradication Programme Board and the North Wales Regional TB Eradication Board. We will continue to maintain engagement throughout the phased rollout of these measures.

Who should I contact for further guidance and support?

We would encourage you to maintain dialogue with your vet who will be able to advise and provide support on the introduction of these measures. However we have outlined further contact details for support below:

- Contact details for APHA: **0300 303 8268**
- Farm Liaison Service <https://gov.wales/farm-liaison-service>
- FarmWell <https://farmwell.wales/get-support/>