



Animal &
Plant Health
Agency

APHA Briefing Note 54/2021

TB changes across Wales: Inconclusive Reactors in Non-breakdown Herds and Officially TB Free Status Withdrawn in Breakdown Herds in Wales.

Date issued: 17 December 2021

Purpose

1. To inform Official Veterinarians (OVs) that from 17th January 2022 that where IRs are found in a non-breakdown herd in Wales, full herd TB restrictions will remain in place at least until the IRs are retested and only then if the retest results are negative.
2. To also inform OVs that from the same date all new TB breakdowns across Wales, with only two exceptions, will be classified as Officially TB Free Status Withdrawn (OTFW).

Background

1. When one or more IRs are disclosed in Officially TB Free (OTF) herds, automatic movement restrictions are applied. On completion of the test, the OV must inform the keeper that the restrictions apply and that the IR(s) must be isolated from the rest of the herd, issuing the Information Note TB181/TB181(Welsh) to the keeper.
2. Currently when the results of TB skin tests conducted in OTF herds which disclose one or more IRs only (i.e. with no reactors) are reviewed by APHA, the testing history of the herd is considered:
 - in those herds where the OTF status was **not** withdrawn in the three calendar years prior to the disclosure of the IR(s), the herd restrictions are lifted and individual movement and isolation restrictions are placed on the IR(s) only

- in those herds where the OTF status has been withdrawn (OTFW) in the past three years, the 'three year rule' is applied i.e. herd restrictions remain with individual movement and isolation restrictions also placed on the IR(s)

3. In Wales, the OTF status is suspended (OTFS) on those breakdown herds where:

- only one skin test reactor has been detected
- no lesions typical of TB have been found at post-mortem examination (PME)
- culture results are negative for *M. bovis* (or pending)
- no higher risk epidemiological factors have been identified.

4. OTFS is also applied to Officially TB Free (OTF) herds where one or more suspect slaughterhouse cases have been found and the culture results are still pending, and on those herds where non-homebred animals positive to an Interferon-gamma and/or IDEXX antibody test only (i.e. no skin test reactors) have been disclosed and disease has not been confirmed on PME/culture results.

5. TB breakdown herds that do not meet the criteria in the previous two points for remaining OTFS, have their OTF status withdrawn (OTFW).

6. The management of OTFS and OTFW breakdowns is different. One Short Interval skin test (SIT) with negative results at standard interpretation is required to lift TB restrictions in OTFS breakdown herds, OTFW breakdown herds require two SITs with negative results (with the first one always at severe interpretation).

What's Changing

Inconclusive Reactors in Non-breakdown Herds

1. From 17th January 2022 onwards, all OTF herds in Wales in which only IRs are disclosed will remain restricted until the retest of the IRs, when either:

- IRs are retested with negative results and herd and individual movement restrictions are lifted, or
- one or more of the IRs become reactors and/or IRs for a second time in which case they will also be considered as reactors, and the OTF status of the herd becomes withdrawn (OTFW) under the change highlighted below.

2. The rationale and expected benefits of this change are:

- a) studies in both Ireland and England have identified that standard IRs, in IR only herd incidents, are at higher risk of becoming reactors subsequently than clear testing animals
- b) it prevents clear testing cattle from being moved out of the herd at a time when there is a higher risk of the herd losing OTF status in the near future

- c) it ensures higher risk animals that would become IRs in the event that a TB breakdown is triggered at the IR retest, cannot move off the premises

Officially TB Free Status Withdrawn in Breakdown Herds

1. Also from 17th January 2022, all new TB breakdowns across Wales, with only two exceptions listed below, will be classified as Officially TB Free Status Withdrawn (OTFW).

2. The only two exceptions, which will continue to be classified as OTFS, are:

- a) OTF herds where one or more suspect slaughterhouse case(s) have been disclosed and culture results are still pending.
- b) in specified spatial areas and clusters in North Wales (please refer to [OV Briefing Note 14/21](#)), breakdown herds where non-homebred animals positive to interferon-gamma and/or IDEXX antibody testing only (i.e. no skin reactors) have been disclosed and disease has not been confirmed on PME/culture results.

3. For these two exceptions, the OTFS herd will become OTFW if:

- one or more skin test reactors (or two-times standard IRs) are disclosed in any subsequent test, usually SITs or Check Tests (CT)
- a slaughterhouse case is culture positive
- visible lesions are found at PME and/or culture results are positive for breakdowns where non-homebred animals are interferon-gamma and/or IDEXX positive only.

4. OTFS herds with a breakdown that started prior to 17th January 2022 will remain OTFS unless any further skin test reactor is disclosed or additional specific epidemiological risk factors are identified.

5. APHA also have discretion to reclassify an OTFS breakdown herd to OTFW, subject to Veterinary Lead Wales discretion.

6. Additional actions are taken in an OTFW breakdown to ensure all risks of spread of disease from infected animals have been minimised:

- a) animals moved from the breakdown herd are traced and tested if appropriate
- b) neighbouring herds are investigated and tested if appropriate
- c) additional animals which are at risk of infection may be considered for slaughter as Direct Contacts (DCs)
- d) slaughter of the remaining animals in the group or herd may be considered if infection is severe and extensive

7. The expected benefits of this change are:

- a) increased sensitivity of the skin test during breakdown testing
- b) a decrease in recurrence of TB infection following the withdrawal of restrictions

- c) an increased likelihood of identifying new TB breakdowns, through trace testing and contiguous testing being applied to all breakdowns
- d) OVs will be able to communicate re-interpretation and explain the reasons clearly to their clients, if they get a single standard reactor at any TB skin test. OVs will also be able to apply DNA reactor tags to all severe reactors disclosed
- e) in the medium to longer term, improvement of the herd TB incidence and prevalence across Wales

Action Required

1. For tests in OTF herds in Wales with a TT2 date on or after 17 January 2022 that disclose only IRs (with no reactors), OVs should inform cattle keepers that the herd is automatically under movement restrictions and that these restrictions will not be removed at least until the IRs are retested with negative results. This also applies to any test where IRs are disclosed in a part test with TT2 date before 17th January, but the final part test is completed on or after 17th January.
2. Please advise cattle keepers that any associated CPHs (permanent or temporary) to the CPH where IRs have been disclosed will have separate movement restrictions served on them by APHA. Any movement of cattle on, off or between associated CPHs will need to be licensed, subject to the usual conditions. In particular, cattle moving between associated holdings must have had a clear skin test in the previous 30 days unless they are under 42 days old.
3. Also from 17th January 2022 OVs disclosing one or more first skin reactors in an OTF or OTFS herd should:
 - reinterpret the test at severe
 - carry out any future parts of the same test at severe interpretation (previous parts of the same test will be reinterpreted by APHA)
 - apply a DNA marking tag to all reactor animals, including severe reactors (this includes those standard IRs that become severe reactors at re-interpretation, if possible)
4. OVs should carry on providing the cattle keeper with the Information Note (TB181/TB181(Welsh)) when IRs and/or reactors are disclosed and advise that they should be isolated pending official notification.

Further Information

1. Q&As in Welsh Government website at <https://gov.wales/officially-tb-free-status-withdrawn-default-and-removal-inconclusive-reactors-3-year-rule>

2. References:

- a. Clegg, T. A. et al. Shorter-term risk of *Mycobacterium bovis* in Irish cattle following an inconclusive diagnosis to the single intradermal comparative tuberculin test; [Preventive Veterinary Medicine 102\(4\):255-64](#)
 - b. Clegg, T. A. et al. Longer-term risk of *Mycobacterium bovis* in Irish cattle following an inconclusive diagnosis to the single intradermal comparative tuberculin test; [Preventive Veterinary Medicine 100 \(3-4\):147-154](#)
 - c. May E, Prosser A, Downs S. H, Brunton L. A. Exploring the risk posed by animals with an inconclusive reaction to the bovine tuberculosis skin test in England and Wales; [Veterinary Science 2019, 6\(4\), 97](#)
 - d. Brunton L. A, Prosser A, Pfeiffer D. U, Downs S. A. Exploring the fate of cattle herds with inconclusive reactors to the tuberculin skin test; [Front. Vet. Sci. 2018 \(5\) 228](#)
3. Please refer any queries to Apha.CymruWales@apha.gov.uk