

Guidance notes for completion of persistent TB breakdown action plan (England)

A TB breakdown is considered persistent when the herd reaches 18 months under movement restrictions. The accompanying action plan aims to help you and your vet identify specific risk factors for persistence of TB infection in your herd and try to reduce them as far as possible. The ultimate aims are to:

- Reduce the potential for your herd to spread TB to other cattle herds and to local wildlife,
- Clear TB infection from your herd so that it can regain its officially TB free (OTF) status, and
- Reduce the likelihood of your herd suffering a repeat breakdown.

Section 1: Background information

This section relates to information about your farm business and cattle herd.

If you have not previously received a Farm Level Data Report¹ for your herd or would like an up-to-date report, contact APHA to request one via 03000 200 301 and select the option for APHA.

Section 2: Biosecurity risk assessment and management plan

Biosecurity measures for bovine TB should be farm-specific, relevant and proportionate to the disease risk. The biosecurity risk assessment and management plan, based on the Five Point Biosecurity Plan, should consider the most relevant TB risks to your herd and control strategies to manage these risks.

To help with completion of this section we strongly advise that you refer to the bovine TB Five Point Biosecurity Plan and other useful information on the TB hub website at <https://tbhub.co.uk/preventing-tb-breakdowns/>. It is also strongly recommended that you seek additional support from the TB Advisory Service (TBAS) on how to improve biosecurity and reduce the impact of a TB breakdown. Contact TBAS to book your free advisory visit <https://www.tbas.org.uk/>

¹ Farm Level Data Reports are produced by APHA using TB breakdown and cattle movement data. The aim of the report is to help you understand the TB risks to your herd and how to take action to reduce these risks. Find out more about Farm Level Data Reports on the TB hub website <https://tbhub.co.uk/advice-during-a-tb-breakdown/other-actions-taken-during-a-tb-breakdown/>

To complete the action plan, follow these steps:

1. Consider each of the five bovine TB risk factors listed in the table and score how much of a risk you think each one poses to your herd (likely, possible or unlikely). These risk factors are taken from the Five Point Biosecurity Plan.
2. For each of the five risk factors, describe the control strategies that are currently in place on your farm to reduce the risk.
3. Discuss with your vet what you can do to further reduce the risk for each of the five risk factors. List the recommendations for action and briefly describe a plan for implementation, including time scales (short, medium or long term). Focus your control strategies on the risk factors that you've identified as most likely to affect your herd. The plan should be realistic to implement and the measures should be practical, proportionate to the risk and affordable. Control strategies to consider for each of the five risk factors are listed in the table below for guidance (not an exhaustive list).

Bovine TB risk factor	Control strategies to consider
<p>1. INCOMING CATTLE Stop infected cattle entering the herd</p> <p><i>Includes newly purchased cattle and cattle returning from outlying premises such as summer grazing or winter housing</i></p>	<ul style="list-style-type: none"> • Review your sourcing policy and only source cattle from OTF herds. • Ask for pre-purchase information from the seller on bTB risk: <ul style="list-style-type: none"> ○ number of years since the herd's last breakdown ○ date and type of last herd TB test (herd tests such as check, radial or short interval tests may indicate increased TB risk and prompt you to consider additional control measures) ○ date of pre-movement TB test ○ if the above information is not available, check the geographic origin of the cattle and buy from low risk areas • Use ibTB https://www.ibtb.co.uk/ to check the TB history of the farm of origin and the local area. • Only buy cattle that have had a pre-movement TB test even if this is not a statutory requirement. Whenever possible, buy within 60 days of a negative <u>herd</u> test as opposed to incomplete herd or individual animal tests (the skin test is more sensitive when used at herd level) • Quarantine new/returning cattle to prevent contact with the rest of the herd. • Post-movement TB test new or returned cattle before they leave quarantine and mix with the rest of the herd. Private interferon-gamma blood testing can be used on its own or to

	<p>supplement a post-movement skin test. Find out more on the APHA Vet Gateway website http://apha.defra.gov.uk/vet-gateway/TB/ifng-testing/index.htm</p>
<p>2. NEIGHBOURING CATTLE Reduce the risk from neighbouring herds</p>	<ul style="list-style-type: none"> • Ensure your cattle can't have nose to nose contact with cattle in neighbouring herds. There should be at least a three metre gap between double fence boundaries and ensure double gates or equivalent at perimeter gateways. • Use ibTB to check the bovine TB situation in your local area. • Don't use shared grazing (e.g. commons) with other cattle herds. If you graze cattle on rented land, ensure there has been at least a 60 day interval since the land was used by other cattle. • Don't share machinery, equipment and vehicles with other farms. If this is unavoidable then ensure that it's cleaned and disinfected between farms using a Defra approved disinfectant for TB • Ensure any personnel who have had contact with cattle from other herds wear clean and/or disinfected protective clothing or provide your own protective clothing for them to use.
<p>3. TB-SUSCEPTIBLE WILDLIFE Restrict contact between badgers/wild deer and cattle</p>	<ul style="list-style-type: none"> • Consider carrying out a wildlife survey of your farm and monitor the presence of wildlife with trail cameras. Guidance on identifying badger activity and camera placement is available on the TB hub website https://www.tbhub.co.uk/tb-in-wildlife/tb-in-badgers/identifying-badger-activity/ • Minimise contact between badgers/wild deer and cattle both at housing and at pasture.

	<ul style="list-style-type: none"> • Implement wild deer control strategies e.g. by consulting an experienced deerstalker.
4. CATTLE FEED AND WATER Manage cattle feed and water	<ul style="list-style-type: none"> • Prevent badger access to feed stores, feed troughs and mineral licks. • Prevent badger access to clamped and/or bulk feeds. • Instigate a regular programme of cleaning and disinfection of feed and water troughs both at housing and at pasture. • Do not provide feed on the ground. • Do not feed unpasteurised whole milk, and especially not waste milk to calves.
5. CATTLE MANURE AND SLURRY Minimise infection from cattle manure	<ul style="list-style-type: none"> • Do not source manure and slurry from other farms. • Do not make recycled manure solids for bedding until OTF status is regained. • Prevent livestock accessing stored manure and slurry. • Compost drier manures well, for at least 30 days. Store wetter manures for as long as possible, preferably for at least six months. • Store slurry for as long as possible before spreading, preferably for at least six months. • Spread manure and slurry on arable land where possible. If spread on grazing or cutting land, ensure at least a 60 day interval before grazing or cutting. • Minimise aerosol production when mixing and spreading slurry e.g. using inverted spreading plate, trailing shoe or direct injection. Do not spread within 20m of grazing fields.

Section 3: Isolation and management of TB reactor and inconclusive reactor cattle

Describe your current policy for isolation of reactors and inconclusive reactors (IRs). Consider isolation facilities, degree of separation between isolated animals and other stock, milking routine (if applicable) and management of slurry and effluent from isolated animals. Best practice guidance is provided below for reference.

Best practice guidance

Best practice isolation means that the animal is kept on its own in accommodation that does not share the same air space, drainage or manure storage as other cattle. Lactating cows can move to and from a milking facility provided they don't come into direct contact with other cattle and are milked after the rest of the herd. The milking facility and equipment should be thoroughly cleaned and disinfected with a Defra approved disinfectant for TB.

Reactors

Includes cattle with a positive result to the interferon-gamma blood test and antibody tests.

- Isolate TB reactor animal(s) as soon as they are found pending their removal from the farm. This is required under the Tuberculosis in Animals (England) Order 2021. Refer to the TB181 information note handed to you by your TB tester when reactors and/or IRs are identified.
- Clearly identify reactor animals (e.g. with marker spray, tail tapes) in addition to the reactor tag inserted into the ear.
- If applicable, milk reactor animals last and thoroughly clean and disinfect equipment after use with a Defra approved disinfectant for TB <http://disinfectants.defra.gov.uk/DisinfectantsExternal/Default.aspx?Module=ApprovalsList> [SI](#)
- Discard milk from reactor animals (this is a statutory requirement under food hygiene legislation) and do not feed to calves.

IRs

- Isolate IRs as soon as they are found. This is a statutory requirement under the Tuberculosis in Animals (England) Order 2021. Best practice is to isolate IRs separately from reactors. Refer to the Notice Requiring Isolation of Animals (TB34) for further guidance.
- Clearly identify IRs e.g. with marker spray, tail tapes.
- If applicable, milk IRs last and thoroughly clean and disinfect equipment after use with a Defra approved disinfectant for TB.
- In persistent breakdown herds, IRs may be removed by APHA as direct contacts and compensation paid. Alternatively, you can consider private slaughter of IRs or a private interferon-gamma blood test to provide additional information about their infection status and help inform decisions about their management. Discuss the options with your private vet and APHA. Information about private interferon-gamma testing is available on the APHA Vet Gateway <http://apha.defra.gov.uk/vet-gateway/TB/ifng-testing/index.htm>
- If an IR tests clear at re-test, remember it must be restricted to the herd for life and can only move off under licence to slaughter or an Approved Finishing Unit. Find out more about the resolved IRs policy on the TB hub website <https://tbhub.co.uk/tb-policy/england/resolved-inconclusive-reactor-policy/>

Cleansing and disinfection

Describe your policy for cleansing and disinfection (C&D) of the isolation facility and any other contaminated equipment following removal of reactor animals. Advice on best practice C&D can be found on the TB hub at <https://tbhub.co.uk/advice-during-a-tb-breakdown/other-actions-taken-during-a-tb-breakdown/>

Further recommendations

Review your policy for isolation and management of reactors and IRs. Discuss with your vet whether any additional measures need to be put in place to ensure strict isolation of reactor and IR animals to reduce the risk of TB transmission to other animals in the herd.

Section 4: Specific risk factors for persistence of TB infection in the herd and how these can be addressed

Review the following risk factors for persistence of infection with your vet to assess whether they apply to your herd. If they do, consider what can be done to address them, list the recommended actions and describe a plan for implementation. Control of some of these risk factors are covered in the biosecurity risk assessment and management plan in section 1.

Risk factor for persistence of TB infection in the herd	Points to consider
<p>Undisclosed infection in the herd How can you minimise risks to uninfected cattle in your herd from cattle that may be infected but have not tested positive to the skin test?</p>	<ul style="list-style-type: none"> • Are handling facilities optimal to allow careful and diligent TB skin testing, without excessive numbers tested in a day? • Are there good handling facilities for TB testing bulls? • Do handling facilities allow TB testing on alternate sides of the neck? • Presence of anergic cattle (TB-infected cattle that do not react to the tuberculin skin test). These cattle may present as slaughterhouse cases (cattle sent for routine slaughter in which typical lesions of TB are found). • Pattern of disclosure of reactors at short interval tests (e.g. a sudden increase)* • Known significant pathology e.g. lung/udder lesions, generalised TB leading to condemnation of carcasses. • Pattern of lesions/age of reactors* • Young calves disclosed as reactors (feeding of waste milk/pooled colostrum).

	<ul style="list-style-type: none"> • If a particular management group appears to be the source of persistence, consider alternative management of the herd to restrict internal movements of this group and limit transmission of infection within the herd. • Private use of more sensitive diagnostic tests (in addition to supplementary blood tests used by APHA) e.g. private interferon-gamma testing, IDEXX or Enferplex antibody testing. Find out more on the APHA Vet Gateway http://apha.defra.gov.uk/vet-gateway/index.htm • Private slaughter of IRs. You must notify APHA so that the correct licence is issued and a post mortem inspection is carried out. • Culling of animals that repeatedly show a positive reaction to bovine tuberculin. • Johne's disease control plan. Potential use of the flexible-extended version of the interferon-gamma test by APHA which provides additional sensitivity in herds with proven Johne's disease infection and/or recent vaccination where cross reactivity is suspected. • Control plans for other diseases which may compromise the immune response of affected cattle, such as Bovine Viral Diarrhoea (BVD) and Infectious Bovine Rhinotracheitis (IBR). Consider management of parasites (e.g. liver fluke infestation) and trace element deficiencies. • Calf feeding protocols including pasteurisation of milk to minimise risks of TB transmission from infected animals with undisclosed infection.
<p>Repeated purchases of infected or susceptible cattle Can you break the cycle of infection by reducing the risk of moving on infected cattle and/or of exposing uninfected cattle to the risk of infection after they have been moved on?</p>	<ul style="list-style-type: none"> • Purchase cattle from low risk herds e.g. Low Risk Area (four-yearly testing) or annually tested herds with no history of TB breakdowns. Use ibTB https://ibtb.co.uk/ to find out the TB history of the herd and local area. • Isolation of animals purchased under licence. • Separation of purchased groups of animals from the rest of the herd and consider how they will be managed when using shared facilities such as the milking parlour or handling facilities.
<p>Contact with neighbouring cattle as a source of sustained infection Could direct (nose to nose) or indirect contact (e.g. from slurry or shared equipment) with neighbouring cattle be contributing to persistence of infection?</p>	<ul style="list-style-type: none"> • Management of boundaries to prevent nose to nose contact with neighbouring cattle herds e.g. double fencing, electric fencing. • Avoid grazing fields when cattle are present in neighbouring fields. • Use of ibTB https://ibtb.co.uk/ to assess the local TB risk from neighbouring herds.
<p>Infection from wildlife</p>	<ul style="list-style-type: none"> • Wildlife survey of the farm to identify signs of badger activity.

<p>Are the on-farm biosecurity measures in place sufficient to control the spread of TB infection to or from badgers and/or wild deer?</p>	<ul style="list-style-type: none"> • Use of wildlife surveillance cameras to assess the extent of badger activity on the farm and target relevant biosecurity measures. • TB Advisory Service visit http://www.tbas.org.uk/ • Biosecurity measures to limit direct and indirect contact between badgers and cattle at housing and grazing (refer to the Five Point Biosecurity Plan and information on the TB hub website).
<p>Other sources of infection Could other animals be acting as a source of infection? For example, cats fed raw milk, other livestock on your own or neighbouring land?</p>	<ul style="list-style-type: none"> • Spreading of slurry/manure from other farms. • Shared machinery/equipment, particularly that for spreading slurry/manure. • Co-located or contiguous farmed non-bovine species (particularly camelids, goats, pigs and farmed deer).

* Refer to the APHA Farm Level Data Report if available.

Section 5: Contingency planning

Consider how you can reduce the impact of movement restrictions and other consequences of the TB breakdown. Once movement restrictions are lifted, think about how to reduce the likelihood of re-infection. Information about contingency planning is available on the TB hub website at <https://tbhub.co.uk/preventing-tb-breakdowns/contingency-planning-for-bovine-tb/>

Possible impacts	Points to consider
<p>Sourcing replacement cattle</p>	<ul style="list-style-type: none"> • Sourcing policy in order to maintain stock numbers to fulfil contractual commitments. • Effective isolation or separation of groups if this is a requirement for licensing cattle into the herd. • Use of sexed semen to increase the pool of homebred replacements.

Outlets for calves, stores, finished cattle and culls to avoid overstocking and other welfare issues	<ul style="list-style-type: none"> • Approved Finishing Units. • Markets for TB-restricted cattle. • TB Isolation Units. • Direct to slaughter.
Bulls	<ul style="list-style-type: none"> • Sourcing policy for breeding season, particularly if block calving. • Breeding your own bulls, particularly if block calving. • Isolation and post-movement TB testing. • Use of artificial insemination.
Heifer rearing	<ul style="list-style-type: none"> • Risks of rearing on separate premises and impact if that is on a different permanent or temporary CPH. • Consider returning heifers around bulling rather than near calving so there's plenty of time if the disease situation on farm worsens. • Contingency for milking at heifer rearing location if they can't return to the home premises as planned. • Can beef cattle be reared elsewhere and heifers remain at the main farm?
Separately managed herds	<ul style="list-style-type: none"> • Maintaining evidence to justify the herds being considered as separate; biosecurity protocols for any shared personnel or machinery and detailed records of movements. • Do separate herds rely on movements between the herds to maintain stock numbers? • Ensure one-way movements whenever possible.
Use of temporary land/housing	<ul style="list-style-type: none"> • Impact of movement restrictions on seasonal agreements. • Is it possible to use temporary land for cropping rather than grazing? • Movements to and from a Temporary Land Association (TLA) are simpler than to/from a temporary CPH.
Tenancy agreement	<ul style="list-style-type: none"> • What impact will a TB breakdown have on the notice period? • Who will complete C&D if the premises is depopulated while under restrictions? Restrictions will be maintained until at least 60 days after depopulation and APHA will carry out inspection of C&D of any buildings used for cattle.

