



BRIEFING PAPER

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Bovine TB and badger culling: devolved administrations

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Policy for dealing with bovine TB is devolved in the UK. The incidence of TB in cattle and wildlife varies across the UK, and as such the control of bovine TB (bTB) is approached differently among the devolved administrations, with different policies on badger control and TB testing in cattle. This briefing paper explains the approach taken in Wales, Northern Ireland and Scotland.

Under existing legislation, cattle must be routinely tested for TB in the UK. In England and Wales, the respective Governments have published strategies to work towards the eradication of bovine TB, while Northern Ireland's strategy is currently under consultation. These policies add to existing requirements on testing in cattle.

Scotland achieved Officially Tuberculosis Free (OTF) status in 2009. Policy in England has included badger culling since 2013, allowing the controlled shooting of badgers under licence. Further details can be found in the Commons Briefing Paper on [Badger Culling in England](#).¹

Box 1: TB Testing in Cattle

As the Department for Environment, Food and Rural Affairs (Defra) sets out, all farmers are required by law to have their cattle tested for bTB at prescribed intervals which must reflect the regional risks of bTB and comply with EU legislation.² There are different [bTB testing regimes](#) in England and the devolved administrations.

Control of TB in cattle relies on the accurate detection and removal of animals infected with the bovine TB bacterium before they can spread the disease. The primary screening test for TB in cattle in the UK is the single intradermal comparative cervical tuberculin test (SICCT), more commonly known as the [tuberculin skin test](#). It is the internationally accepted standard for detecting *M. bovis* infection in live animals. The [interferon gamma \(IFN-γ\)](#) blood test is a laboratory-based supplementary test for the diagnosis of TB in cattle. It can identify cattle in earlier stages of infection, but it also is more likely to produce false positives, which is why it is not used as the main screening test.^{3,4}

¹ CBP, [Badgers: Culls in England](#), 12 October 2017

² Defra, [Bovine TB Testing intervals, 2017](#), 28 September 2017 (as accessed on 20 December 2017)

³ TBHub, [Cattle interferon-gamma \(IFNγ\) testing for bovine tuberculosis](#), (as accessed on 3 November 2017)

⁴ Welsh Government, [Surveillance testing](#) page, 19 September 2017 (as accessed on 6 November 2017)

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Cattle are tested at differing intervals depending on the incidence of TB infection in the area and the TB status of the herd, based on each administrations' testing policy. There is a bTB testing programme in place for:

- surveillance (screening cattle for presence of infection)
- breakdown management, (where a herd is known to have infection present)
- where there is suspicion of infection.⁵

These testing programmes determine the TB status of the herd and facilitate trade in cattle and products, both domestic and international.⁶

1. Wales

The Welsh Government established a bTB Eradication Programme in 2008 to work towards a long term goal of eradicating TB in cattle in Wales. The programme has been aimed at tackling all sources of bTB infection, with various different elements being introduced progressively.⁷ Measures have included stricter cattle TB testing and controls, with additional measures implemented in an area of west Wales with one of the highest incidence rates of bTB (the Intensive Action Area or IAA).

In 2010 the Welsh Government made plans to carry out a pilot cull of badgers in selected areas of Wales, to attempt to control bTB. This was halted following a Court of Appeal ruling.⁸ After the Labour Party won a majority in the Welsh Assembly in May 2011, it made an announcement that proposals for badger culling would be suspended pending a review of the science.⁹ The proposed cull was replaced with a badger vaccination programme which has been in place since 2012.

2012 Framework for Bovine TB Eradication

In March 2012 the Environment Minister announced a new Strategic Framework for bTB Eradication and set out the agenda for action to be taken over a 4 year period.¹⁰ Included in the framework were actions to improve the management of TB in cattle and the announcement of a badger vaccination project in the Intensive Action Area (IAA) in south west Wales to replace the proposed badger culling.¹¹ The IAA also includes an intensive TB testing regime for cattle.

A five year vaccination programme started in the spring of 2012. The long-term aim of the programme was to decrease the level of infection in the badger population, and thus reduce the risk of badgers spreading the disease to cattle.¹² Over 5,000 doses of badger vaccine were administered between May 2012 and May 2017.¹³ The Welsh Government has also established a [Badger Vaccination Grant](#) to support privately delivered badger vaccination projects in Wales, which covers up to 50% of the eligible costs.

In 2017, according to the Welsh Government, over 95% of cattle herds in Wales were declared TB free, and the number of new TB incidents is at a 12 year low.¹⁴ Despite falling

⁵ Welsh Government, [Testing for TB in your herd what this means to you \(Wales\)](#), January 2016

⁶ *ibid*

⁷ Welsh Government, [Wales TB Eradication Programme](#), 2017

⁸ Minister for Rural Affairs, [Written Statement: No quick fix for bovine TB](#), 20 September 2010

⁹ Welsh Government, [Environment Minister announces programme of badger vaccination](#), 20 March 2012

¹⁰ Welsh Government, [Consultation Summary of Response: A Refreshed TB Eradication Programme](#), February 2017

¹¹ Welsh Government, [Environment Minister announces programme of badger vaccination](#), 20 March 2012

¹² Welsh Government website, [Badger Vaccination in the IAA](#) [website as of 19 September 2013]

¹³ Welsh Government, [Intensive Action Area](#), 26 May 2017

¹⁴ Welsh Government, [Wales TB eradication programme](#), 2017

numbers of new TB incidents, the number of cattle slaughtered increased significantly in the 18 months to March 2017.¹⁵ This is the result of policy changes intended to increase the sensitivity of TB testing which have been used to help clear up infection in herds and reduce the risk of the disease spreading. According to the Welsh Government:

In Wales, the number of new incidents recorded has reduced by 47% in eight years through application of increased testing frequency, improved biosecurity and other cattle control measures alone. However, it is recognised that in a number of long term TB breakdowns the disease picture points towards a wildlife reservoir of infection.¹⁶

Box 2: Vaccination in Badgers

Vaccination of badgers aims to reduce the incidence of TB in badger populations and thus reduce transmission of TB between badgers and from badgers to cattle. In 2010, an injectable badger vaccine, Badger BCG, became available for use following 10 years of study by the Animal Health and Veterinary Laboratories Agency (AHVLA). The vaccine is available in the UK for use by vets and trained lay vaccinators under prescription from a veterinary surgeon.¹⁷

The vaccine for bTB does not offer complete protection against infection, but if a vaccinated badger is infected the severity and progression of the disease is reduced so that the animal is less likely to spread infection.¹⁸ It is not necessary for all individuals to be immune for vaccination to deliver a benefit, as the Welsh Government [explains](#):

Vaccinating a proportion of a population stops a disease from spreading as there are fewer individuals who can be infected. This effect is known as 'herd immunity'.

An independent review of the scientific evidence base concluded that, over time, the vaccination of badgers should reduce of the incidence of TB in cattle herds.¹⁹

Badgers currently must be cage trapped before they can be injected with the vaccine. Research is being conducted into the development of an oral vaccine which could be a more practical method of delivering the vaccine to badgers. However, there remain technical and practical challenges to overcome.²⁰

Refreshed Wales TB Eradication Programme

In 2017 the Welsh Government published a new [Wales TB Eradication Programme](#) which establishes the Welsh Government's long term vision with regard to TB eradication. The [Wales TB Eradication Programme Delivery Plan](#) sets out the key enhancements to the Programme which will allow the Welsh Government to react quickly and flexibly to the changing disease picture and new information.²¹

The Delivery Plan sets out a new regionalised approach to TB eradication, introducing low, intermediate and high TB Areas starting on 1 October 2017. The Delivery Plan also details a change to its approach to wildlife, including the introduction of limited badger culling in certain areas. The Welsh Government has set out its approach as follows:

¹⁵ Welsh Government, [Why are we currently slaughtering more cattle for TB than we used to?](#), 19 September 2017

¹⁶ Welsh Government News Release, ["Bovine TB at ten year low, but we must work together to eliminate disease"- Wales' Chief Veterinary Officer](#), 27 January 2017

¹⁷ Welsh Government, [Badger Vaccination](#), 21 January 2016

¹⁸ Chambers MA et al., ['Vaccination against tuberculosis in badgers and cattle: an overview of the challenges, developments and current research priorities in Great Britain'](#), Veterinary Record, 2014

¹⁹ Welsh Government, [Badger Vaccination](#), 21 January 2016

²⁰ Welsh Government, [Badger Vaccination](#), 21 January 2016

²¹ Welsh Government, [Wales TB Eradication Programme](#), 2017

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Where infected animals are found, either cattle or badgers, it is reasonable and proportionate to remove them as possible sources of infection to break the cycle of transmission. Interventions will be monitored closely and adapted if necessary.

What is changing?

- A Badger Found Dead Survey will continue across Wales.
- The Welsh Government will continue to assess the most appropriate deployment of the Badger BCG vaccine if and when it becomes available.
- As part of the ongoing Action Plan process, where the Welsh Government views that badgers are contributing to the persistence of disease in chronic herd breakdowns, badgers will be trapped and tested on the breakdown farm and test positive badgers will be humanely killed. Persistent herd breakdowns will be focussed on initially.²²

2. Northern Ireland

Bovine TB incidence in Northern Ireland has been increasing since the 1980s. In December 2010 herd incidence was 5.07%. At the end of September 2017, the annual herd incidence was 9.26%.²³

Northern Ireland has been conducting a Road Traffic Accident (RTA) survey of badgers since 1998, where bTB tests are carried out on badgers reported dead by the public. The results from this suggest that at least 17% of badgers in NI are infected.²⁴ In response to this, in 2014, a 5 year “[test and vaccinate or remove](#)” (TVR) research project began in the Banbridge area of County Down, trialling an approach to controlling bTB in badgers by vaccinating bTB negative badgers and culling test positive badgers. This is due to finish in 2018.

The TB Strategic Partnership Group

Northern Ireland set up a [TB Strategic Partnership Group](#) (TBSPG) in 2014 which published its recommendations to Government in a [Bovine TB Eradication Strategy \(TBSPG Strategy\)](#) in December 2016. The strategy set out the TBSPG’s view “that any effective strategy to eradicate bTB in cattle must address the disease in badgers.”

In evaluating methods of badger control, the TBSPG Strategy states that while in the long term badger vaccination would significantly improve the disease situation in both badgers and cattle, they consider that culling of badgers would be required in order to:

‘...reduce infection load and badger densities in particular areas before a vaccination programme in that area could be effective.’²⁵

The TBSPG Strategy proposed that Northern Ireland adopt badger control with a two-step approach in the areas identified for intervention combining proactive culling in areas with high cattle disease and a test, vaccinate or remove, approach in the surrounding areas:

The TBSPG proposed a policy which would include the proactive culling of badgers in areas of high levels of bTB in cattle, which would be known as the central or ‘core zone’. In order to mitigate the risks associated with any perturbation effect, the vaccination of badgers, combined with the culling of test positive badgers would be carried out in a surrounding area or ‘buffer zone’ (i.e. a TVR approach). The TBSPG recommended that this approach should be carried out in areas of at least 100 sq km and should be repeated for a period of at least four years. The Group also recommend

²² Welsh Government, [Wales TB Eradication Programme Delivery Plan](#), 2017

²³ DAERA, [Consultation on the Department’s Response to the TB Strategic Partnership Group’s Recommendations to Eradicate Bovine Tuberculosis \(bTB\) in Northern Ireland](#), November 2017

²⁴ Ibid.

²⁵ TB Strategic Partnership Group, [Bovine Tuberculosis Eradication Strategy for Northern Ireland](#), 2016

that follow-up vaccination should be considered for a further period of approximately three years in the core removal zone.²⁶

A Bovine Tuberculosis Eradication Strategy for Northern Ireland

In response to the TBSPG Strategy the Department for Agriculture, Environment and Rural Affairs (DAERA) opened a [consultation](#) on a 'Bovine Tuberculosis Eradication Strategy for Northern Ireland' on 30 November 2017.

The consultation sets out the [Government response](#) to the recommendations in the TBSPG Strategy, and outlines that the Government is generally supportive of targeted wildlife interventions as proposed by the TBSPG to control TB in badgers:

The Department has yet to undertake detailed analyses of the number of areas to be targeted in any wildlife intervention, and the combination of approaches most appropriate for each. It is, however, generally supportive of targeted wildlife interventions with culling in a central zone, and complementary perturbation mitigation actions (for example in buffer and/or core zones) where appropriate. The Department is also minded to further consider follow-up vaccination to protect the areas after the intervention has ceased, as appropriate.²⁷

New measures to eradicate bovine TB announced

DAERA has also stated that as part of its ongoing bTB Programme review it has already implemented or plans to implement a number of improvements aligned with the TBSPG's recommendations. The latest, affecting the cattle testing regime, were [announced](#) on the 20 September 2017, by the NI Chief Veterinary Officer. The measures were rolled out in autumn 2017, and included a more frequent testing regime for cattle and stricter interpretation of positive test results, and the introduction of a biosecurity self-assessment list for farmers.²⁸

With regards to tackling the infection in badger populations, surveys of badger populations and testing of a small number of badgers took place in autumn 2017:

The Department has carried out surveys of badgers for bTB infection in two areas (one around Aghadowey, Co. Londonderry and the other near Omagh, Co. Tyrone). These were selected as they are areas that have a high density of herds with bTB reactors and are also thought to have a high density of badgers. As part of these surveys, Departmental staff have mapped badger setts, blood tested a small number of badgers and removed any test positive badgers for laboratory examination. Any released badgers were vaccinated against bTB.²⁹

3. Scotland

Scotland achieved Officially Tuberculosis Free Status (OTF) in September 2009. OTF is recognition of the relatively low and stable incidence of TB found in Scottish herds. In Scotland, wildlife, including badgers, is not considered to be a high risk in terms of spreading bovine TB to cattle herds.³⁰

The Scottish Government released an [update on the status of Bovine TB](#) in Scotland in August 2017. It outlines that:

²⁶ DAERA, [Consultation on the Department's Response to the TB Strategic Partnership Group's Recommendations to Eradicate Bovine Tuberculosis \(bTB\) in Northern Ireland](#), November 2017

²⁷ DAERA, [Consultation on the Department's Response to the TB Strategic Partnership Group's Recommendations to Eradicate Bovine Tuberculosis \(bTB\) in Northern Ireland](#), November 2017

²⁸ Department for Agriculture, Environment, and Rural Affairs, [DAERA steps up efforts to eradicate Bovine TB](#), 20 September 2017

²⁹ DAERA, [Consultation on the Department's Response to the TB Strategic Partnership Group's Recommendations to Eradicate Bovine Tuberculosis \(bTB\) in Northern Ireland](#), November 2017

³⁰ Scottish Government, ['TB in Non-Bovine Animals'](#) page, (as accessed on 2 November 2017)

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Having OTF status does not mean that Scotland does not have any cases of bovine TB. OTF status is achieved by demonstrating compliance with the requirements set out in EU legislation. We still expect to see a small number of cases occurring each year, but due to our stringent controls this remains well within the threshold for retaining OTF status.

To achieve OTF status the percentage of bovine herds confirmed as infected with TB must not exceed 0.1% of all herds per year, for six consecutive years.

The number of new occurrences of bovine TB in Scotland for 2016 was 11, which is consistent with another year of OTF status. Most cases in Scotland can be traced to movements of infected animals.³¹

³¹ Scottish Government, '[Update on Bovine TB](#)', 11 August 2017

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