

Vaccination

There is no vaccine available for bTB.

The following is an extract from the Government consultation document that can be found [here](#) or on the News page of this website

Extract from:

Bovine Tuberculosis: The Government's approach to tackling the disease and consultation on a badger control policy

Cattle vaccines research

61. Although there is currently no cattle vaccine available, work to develop one demonstrates that cattle vaccination could have potential benefits in reducing prevalence, incidence and spread of bovine TB in the cattle population and could also reduce the severity of a herd breakdown regardless of infection being introduced by wildlife or cattle. However, a cattle vaccine will not guarantee that all cattle vaccinated are fully protected.
62. Defra had invested £18 million by the end of the last financial year on the development of cattle vaccines and associated diagnostic tools. We aim to have a licensed cattle vaccine by 2012. This vaccine is BCG (*Bacille Calmette-Guérin*, the human TB vaccine) which sensitizes cattle to the mandatory tuberculin skin test for some time after vaccination and can lead to a positive result when an animal is not infected with *M. bovis* (a 'false positive'). Therefore Defra is also developing a diagnostic test to differentiate infected from vaccinated animals (known as a 'DIVA' test) that could be used alongside the tuberculin skin test, where necessary, to confirm whether the animal is indeed infected. Our aim is also to have the DIVA test approved by 2012.

²⁶ EU Directive 78/52/EEC

²⁷ EU Directive 64/432/EEC) and implementing domestic legislation (Tuberculosis (England) Order 2007)

²⁸ Regulation (EC) No 853/2004

63. However, there is currently an EU ban on vaccinating cattle against *M. bovis*²⁶ and only cattle which test negative to the tuberculin skin test can be traded in the EU²⁷. These restrictions also have consequences for trade in cattle products. Hygiene rules for food of animal origin²⁸ stipulate that raw milk must come from cows belonging to a herd which is officially TB-free (OTF). Milk from non-OTF herds can still be used but must be pasteurised, and milk from cows that give a positive reaction to a bovine TB test cannot enter the food chain. Once a licensed cattle vaccine and effective DIVA test are available, the basis for declaring herds tuberculosis-free will need to change. As part of the ongoing consultation on the new EU Animal Health Law, we will be using the strong scientific and technical evidence on the efficacy and safety of the cattle vaccine and the role of a DIVA test to request the necessary changes to EU legislation to lift the requirement for the skin test to be the only test to confer OTF herd status. Due to the need to change EU legislation, which is a lengthy process, we anticipate that a cattle vaccine and DIVA test could not be used in the field before 2015 at the earliest. In parallel with discussions at EU level we will be working with the food industry and regulators to provide the necessary reassurance about the safety of meat and other animal products entering the human food chain where they derive from animals which tested clear of bovine TB but which had been vaccinated.

Badger vaccines research

64. Defra and its research agencies are among the leaders internationally in developing TB vaccines for badgers, working particularly closely with researchers and Governments in the Republic of Ireland, New Zealand, Spain and the USA. Since 1999, Defra has invested over £11 million on research into badger vaccines, and the injectable BCG badger vaccine is now available. It is currently being used in a Government-funded Badger Vaccine Deployment Project in one area in Gloucestershire. This project involves training operatives to use the vaccine in the field and seeks to increase confidence in the use of injectable badger vaccines, while looking at the practicalities of the vaccination process.
65. An oral badger vaccine, which may be a more practical option in terms of field deployment, is still at the research stage and will not be available until 2015 at the earliest. Compared to an injectable vaccine, an oral vaccine is technically more difficult to formulate. It also requires the selection of a bait which encourages ingestion of the vaccine by badgers but minimises the potential for other species to eat it. The efficacy of potential oral vaccine formulations is currently being tested by the Veterinary Laboratories Agency (VLA).