

Badger Vaccination – Guidance for Veterinary Surgeons

This factsheet explains some of the practical aspects of vaccinating badgers with the BadgerBCG tuberculosis vaccine. It describes the role of the veterinary surgeon in prescribing and directing the use of the vaccine, and how lay vaccinators can vaccinate badgers under the direction of a veterinary surgeon.

BadgerBCG

- BadgerBCG is a live, freeze-dried vaccine prepared from an attenuated strain (BCG Danish strain 1331) of *Mycobacterium bovis* (*M. bovis*).
- It has a Limited Marketing Authorisation for the active immunisation of badgers to reduce lesions of tuberculosis caused by *M. bovis*.
- It must be stored and transported refrigerated (2°C - 8°C).
- The recommended dose is 1 ml of reconstituted vaccine containing $2-8 \times 10^6$ colony-forming units, administered by intramuscular injection.
- Although the duration of immunity is unknown, annual vaccination on a population basis is recommended (usually for four years) due to natural turnover of the population.



Further product information is available in the SPC, which is available online on the VMD's Product Information Database at [SPC_280836.PDF \(defra.gov.uk\)](https://www.vmd.gov.uk/spc/280836/PDF)

Supply and use of the vaccine

BadgerBCG has a distribution category of Prescription Only Medicine-Veterinarian (POM-V) and can only be used for vaccinating badgers as part of bovine TB control. Under the Veterinary Medicines Regulations 2013, veterinary surgeons may prescribe BadgerBCG for use in wild badgers without first carrying out a clinical assessment of the animal or having the animal under their care, as authorised by the Secretary of State.

Under The Veterinary Surgery (Vaccination of Badgers against Tuberculosis) Order 2010, lay persons holding a valid certificate of competence, granted by an approved course provider, are permitted to vaccinate badgers against tuberculosis by injection, subject to compliance with the conditions in the Order. One of the conditions is that the lay vaccinator is acting under the direction of a veterinary surgeon. Directing veterinary surgeons should have a dialogue with lay vaccinators to ensure direction is meaningful, and veterinary attendance must be available in the event of an emergency. A directing veterinary surgeon can delegate the emergency response role to another 'attending vet' if required.

Licensing

Licences are required to cage-trap and mark a badger for the purpose of vaccination. All persons, including veterinary surgeons, wishing to perform these licensable activities must hold the relevant licences. [Licences to cage-trap and mark badgers for bovine TB vaccination - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/licences-to-cage-trap-and-mark-badgers-for-bovine-tb-vaccination)



Overview of the process

The cage-trapping process involves multiple stages, including several days of pre-baiting the traps before they are set to catch. When the bait (usually peanuts) is being regularly taken by badgers, the traps will be set to catch. Trapping is usually conducted over two consecutive nights with traps being checked at first light and all badgers processed and released by prescribed cut-off times.

On vaccination mornings, the following process is followed for trapped badgers:

1. An observational health and welfare assessment is performed to check the badger is fit to vaccinate.
2. The 1 ml dose of BadgerBCG is administered by injection into thigh muscle. Most badgers can be vaccinated without any need to restrain them. If a badger requires restraint, this is achieved using a 'wicket' (a pronged restraining device that can be inserted through the trap mesh).
3. Once vaccinated, the badger is temporarily marked by using curved scissors to clip an area of fur (to remove the outer dark guard hairs and expose the undercoat) about 6 cm by 9 cm on the middle of its back. The clipped area is then sprayed with livestock marker. If a marked badger is captured again during the same season, it can be released without further vaccination. The mark also supports pharmacovigilance e.g., if a marked badger is found dead within a few days of vaccination.
4. After vaccination, a second observational health and welfare assessment is performed to check there is no evidence of an adverse reaction to the vaccine and to confirm the badger is fit for release.

Veterinary support on vaccination mornings

It is the responsibility of those trapping and vaccinating badgers to request (and pay for) a visit from the directing veterinary surgeon (or 'attending vet') if required. Veterinary advice should be sought promptly if a lay vaccinator has any doubt about the fitness of a captured badger to be vaccinated and/or released, if a captured badger appears to be seriously injured, or in the unlikely event an adverse reaction to the vaccine is suspected. Veterinary surgeons can carry out euthanasia of badgers if this is deemed necessary on welfare grounds.

Where an adverse reaction to BadgerBCG is suspected, the veterinary surgeon/lay vaccinator are asked to report this to the Marketing Authorisation Holder (MAH) - Contact details: Person Responsible for Pharmacovigilance, Quality Services, APHA Weybridge, Addlestone, Surrey, KT15 3NB – Tel: 03300 416 578.

It is very rare that a veterinary visit is required on a vaccination morning (<1 in 2000 captured badgers requires emergency veterinary care). The cage traps used are humane and trap-related injuries, other than minor abrasions, are very unusual. Nonetheless, the veterinary cover is essential, and it is a licence condition that a veterinary surgeon is on call and able to attend the trapping location if needed in an emergency.

Lay vaccinators may also request veterinary support on a vaccination morning if certain non-target species are captured in traps, such as Muntjac deer or Grey squirrels. Under the Wildlife and Countryside Act 1981, it is an offence to release these species and veterinary support to achieve humane euthanasia of the animal may be requested.

Other information

Wholesaler

Veterinary surgeons can purchase BadgerBCG from:
National Veterinary Services
Spitfire House, Unit C250, Iron Place
Stoke on Trent
Staffordshire
ST1 5FG
Telephone: 01782 775555

Key contacts

The relevant authorities to licence the trapping and marking of badgers in England are Defra and Natural England.

Further information on the veterinary aspects of badger vaccination can be obtained from the Animal & Plant Health Agency – email badgervaccinetraining@apha.gov.uk for the attention of APHA Woodchester Park's veterinary surgeon.



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