Badger Vaccination in Cornwall: your questions answered

ZSL is vaccinating badgers in West Cornwall. If you are thinking of signing up, or just want to know more, our handy FAQ should help you.

Why vaccinate badgers?
Badgers can carry a disease called bovine tuberculosis (TB) which is a major problem for cattle farmers. Most cattle get TB from other cattle, but badgers can also transmit the disease, making TB eradication more difficult.

Does vaccination protect badgers from TB?
Yes. In a scientific trial, badgers which had been vaccinated were 76% less likely to test positive for TB. If vaccinated badgers do become infected, they are less likely to excrete TB bacteria than are unvaccinated badgers.

Does badger vaccination protect cattle from TB?
Any management which reduces the number of badgers with TB is likely to benefit cattle. To work out how much it can reduce cattle TB, a large number of farms need to be vaccinated, and studied over time – that’s what our project is doing. The Irish government has already conducted such a trial, and is replacing its badger culling programme with badger vaccination.

Can vaccination make TB worse?
No. This has been looked at very carefully, and we and other scientists have concluded that vaccination cannot make TB worse. Vaccinated badgers do not shed the vaccine into the environment. Badgers do not change their behaviour after vaccination. Periodically trapping and releasing badgers does not change their behaviour, and it does not increase their TB risk.

Will vaccinating badgers stop TB completely?
No. Many herds get TB from other cattle herds, and badger vaccination cannot stop that from happening. Even if badger vaccination reduces TB risks on average, individual farms can still be unlucky enough to get TB.

I don’t have a problem with TB – should I vaccinate my badgers?
Lucky you! If you are a farmer, badger vaccination should help your herd stay TB-free. It won’t increase your TB risks. And, if an infected badger moves onto your land, or if you accidentally bring in infected cattle, having vaccinated badgers should help prevent TB from getting established on your land. Even if you don’t have cattle yourself, vaccinating your badgers should help cattle farmers in your neighbourhood.

How can vaccinating badgers reduce TB?
We vaccinate badgers each year, including the cubs, so that over time the number of vaccinated animals builds up. Badgers generally live for between three and five years and so, over time, infected badgers die off and should be replaced by vaccinated animals.

Do you have to vaccinate every badger?
No. Estimates from Ireland suggest that vaccinating just 30% of badgers might be enough to eradicate TB over time. We aim higher than this, because the higher the proportion vaccinated, the quicker TB can be controlled.

How often do you have to vaccinate each badger?
The vaccine is likely to protect each badger for over a year. We have to vaccinate every year, to catch the year’s cubs, so we just vaccinate every badger we catch.

What if you vaccinate a badger that’s already infected?
Nothing happens. Vaccination cannot cure badgers which are already infected: there is no evidence that vaccination makes infected badgers any more or less infectious. Vaccinating other group members should help to stop that infected animal from spreading the disease, though.

Do vaccinated females pass on immunity to their cubs?
No: immunity cannot be directly passed from a mother to her cubs. However, vaccination does stop TB transmission within badger groups: vaccinating over a third of adults in a group reduces the proportion of infected cubs by 79%.

What vaccine do you use?
We vaccinate badgers using Bacille Calmette-Guerin (BCG) vaccine, the same vaccine used for people.

Can you feed badgers vaccine instead of injecting them?
An oral vaccine sounds appealing, but in fact it may be neither cheaper nor more effective than injecting vaccine. Cattle which accidentally consume vaccine baits can react to the TB test, so baits have to be placed in badger sett entrances where cattle cannot reach them. To vaccinate enough animals, badgers first have to get used to eating the baits, which means delivering baits to setts daily for a week or more – almost as much work as baiting traps. Then, a single greedy badger can eat all the baits, so reaching the whole group means putting out a lot of (expensive) baits. So trapping may be cheaper in the long run.

Contact us on badgers@zsl.org
How will we know it’s working?
We take blood and faecal samples from some of the badgers we catch, to monitor how the proportion of badgers with TB changes as the population is vaccinated. The vaccine does not interfere with the testing.

Why not cull the badgers that test positive?
The tests have to be done in a lab, so we won’t know which badgers test positive until months after we vaccinate them. If we were to come back to cull where badgers test positive, it would disrupt the badger population and might spread TB to neighbouring farms. That’s why the government won’t currently license small-scale culling. It is illegal to kill badgers without a licence.

Who vaccinates badgers?
Only people who have been trained and licensed by Natural England are allowed to set badger traps and vaccinate badgers. The ZSL team is made up of local experts with years of badger-trapping experience.

When does it happen?
The vaccination season runs from the 1st May to the 30th November each year. Outside this period, we survey land to prepare for the next year’s vaccination. We vaccinate each site once a year for four years.

I want ZSL to vaccinate badgers on my land, what do I need to do?
All you need to do is to show us your land boundaries on a map, complete a consent form to tell Natural England that you want your land to be vaccinated, and allow us access to your land for short periods to survey and trap.

Can I watch?
Of course! You are very welcome to come and see the badgers we catch on your land.

What’s ZSL?
ZSL stands for “Zoological Society of London” – the organisation that owns London Zoo. But our team is Cornwall-based.

How do I get started?
You can contact the project on badgers@zsl.org or 07891 476996

I’m not a farmer, can I still sign up?
Yes! Vaccination will be most effective if we can cover as much land as possible, and that includes land used by badgers which is not farmed.

Are there other benefits?
Vaccinating badgers preserves their important role in farmland ecosystems, for example keeping fox numbers down. Also, some farmers have asked about marketing their produce as “badger friendly”, and we are working to develop a labelling scheme for them.

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