



Fever Tick Vaccine Fact Sheet



About the Fever Tick Vaccine

Bm86 immunomodulator by Zoetis is a new vaccine that is being used in the Cattle Fever Tick Eradication Program. The vaccine targets and kills both species of cattle fever ticks: *Rhipicephalus* (formerly *Boophilus*) *annulatus* and *R. microplus*.

How the Vaccine Works

After cattle have been vaccinated, their immune system will produce antibodies in the blood that will fight against a protein found in the lining of the tick's gut. The tick will take in the antibodies when it consumes the blood of vaccinated cattle.

The antibodies bind to the lining of the intestines in the tick, which prevent the tick from absorbing nutrients. The vaccine will kill or weaken ticks as they feed on vaccinated cattle and weak surviving ticks will not be able to reproduce.

Vaccine Use

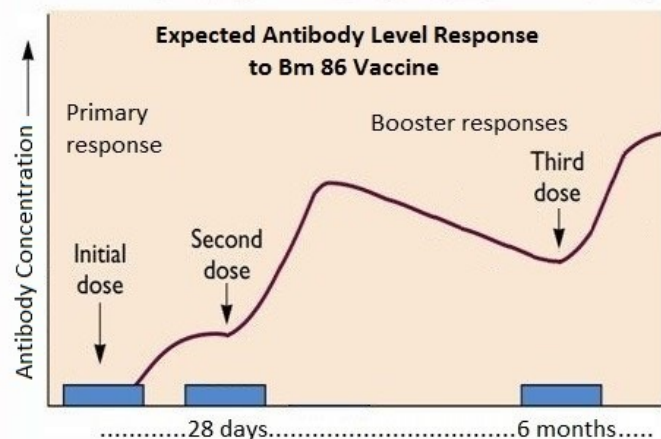
The vaccine will be used in addition to eradication practices already in place for the Cattle Fever Tick Eradication Program. **It will not replace systematic treatments.** Vaccines will only be administered by USDA/APHIS/Veterinary Services, Texas Animal Health Commission employees or authorized agents.

Cattle That Should be Vaccinated

- **Cattle in Permanent Quarantine:** Beef cattle over two months of age are required to be vaccinated at least once a year.
- **Cattle in Temporary Preventative and Control Quarantine Areas:** Beef cattle over two months of age may be required to be vaccinated if there is an elevated risk determined by USDA/TAHC epidemiologists.
- **Cattle in the Free Area:** Cattle should not be vaccinated at this time.

Vaccination Schedule

Cattle should receive an initial dose, a booster four weeks later, followed by additional boosters every six months. This schedule is important because one dose will not produce enough antibodies to be effective. Vaccination every six months after the initial dose and booster is needed to keep the concentration of antibodies in the blood high enough to be effective.



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Reasons to Vaccinate for Cattle Fever Ticks

The new fever tick vaccine will be a valuable tool to reduce the current tick population and help prevent future tick generations. The vaccine will kill or weaken ticks as they feed on vaccinated cattle and weak surviving ticks will no longer be able to reproduce. The vaccine, in addition to current eradication practices, will help prevent new infestations.

Frequently Asked Questions

Q. Is it safe?

A. Yes, field safety trials identified no adverse reactions related to the vaccine.

Q. What will it cost me?

A. Vaccine and administration is provided at no cost to producers.

Q. What is the withdrawal period?

A. There is a 60-day withdrawal period.

Q. My cattle are outside of the quarantine zones, can I still vaccinate my cattle for fever ticks?

A. No, at this time the vaccine will only be used in quarantine zones. Cattle are the preferential hosts for the fever ticks. Inspection of cattle for fever ticks is an important monitoring tool for spread of ticks. Vaccinating cattle outside of the quarantine zones could mask tick movement.

Q: Who administers the shots?

A. Vaccinations will be administered by USDA/APHIS/Veterinary Services, Texas Animal Health Commission employees or authorized agents.

Q: If I vaccinate my cattle, do they still have to be gathered and scratched according to my herd plan?

A. Yes, because vaccination will not replace treatment or inspections. Vaccinated cattle will still need to be gathered and scratched.

Q: When will vaccination start?

A: The vaccine is ready now and vaccination of herds has already started.

Q: Is the vaccine mandatory?

A: It is mandatory for cattle located in the Permanent Quarantine Zone and may be required on premises with high risk of fever tick infestation.