

2008 BLUE TONGUE VACCINATION CAMPAIGN BTV 1 - BTV 8 IMMUNIZATION CONTROL IN SPAIN

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Background

BTV1 was first notified in July 2007 in the south of Spain. In January 2008, BTV8 made its appearance in the north of Spain. Due to further spread of the disease, in October 2008 it was decided to extend the restriction zone for BTV1 and BTV8 to the whole country, excluding the Balearic and Canary Islands

The disease control measures were: movement restriction, entomological surveillance, sentinel surveillance, clinical examination and the vaccination of bovine and ovine over 3 months old against both BTV 1 & 8 reaching a vaccination coverage in bovine and ovine over 90%

Aim

Assess the immunological response to the 2008 BTV 1&8 vaccination campaign

Methods

Target population:

- BTV 1&8 vaccinated ovine and bovine
6,887,638 bovine 21,267,945 ovine

Sampling Strategy:

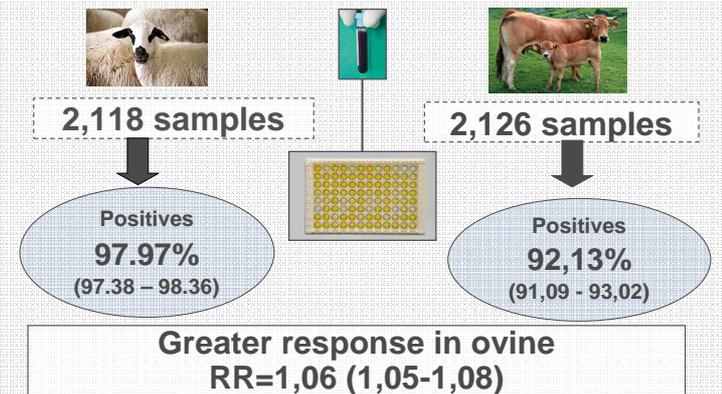
- Stratified simple random sampling (90% prevalence 95%CI)
- At least 15 days post vaccination
- Avoid areas where virus circulated the previous year.
- At least 10 holdings per region and 10 animals per holding

Laboratory Technique

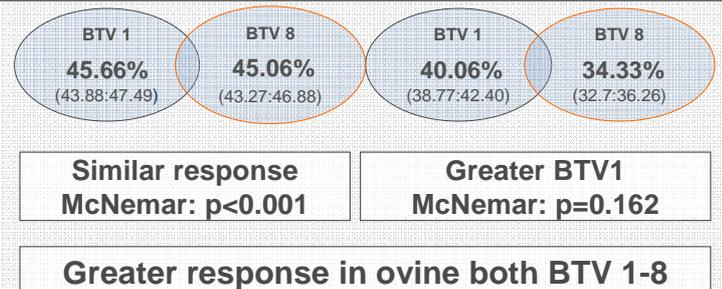
- ELISA & Seroneutralization at the National Reference Laboratory (Algete)

Results

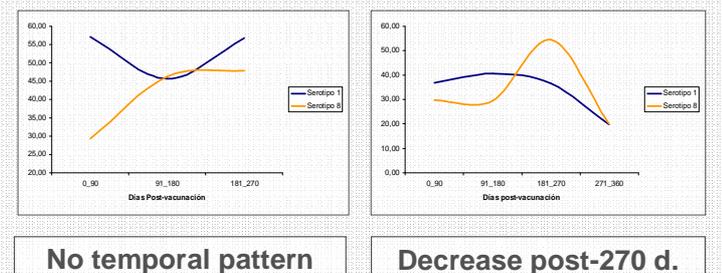
ELISA (double antigen)



SERONEUTRALIZATION



TEMPORALITY



Conclusions

- High serologic response (ovine&bovine)
- Neutralizing antibodies in half of population
- Ovine better response than bovine
- Bovine greater response against BTV1
- Neutralizing antibodies not responsible for BTV protection. Cellular response involved
- Ovine no temporal pattern, bovine decrease after 270 days (both BTV 1-8)