

Cost benefit analysis of adoption of bovine brucellosis control measure in Brazil: preliminary results

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The aim of the present work is to estimate the costs and benefits of the adoption of bovine brucellosis control in 13 Brazilian States and to compare the strategies between the States and evaluate their economic viability. The base case is the scenario where no actions are taken, allowing the comparison with the implemented actions of control. The benefits of the base case are: meat and milk production; revenues with outward live animals. The costs of the base case are: reposition of females; inward live animals. The benefits of brucellosis control measures are: reduction of milk and meat production; abortion; infertility of aborted females; perinatal mortality; increase of interval between parturition; mortality of aborted cow; increase in replacement requirement. The costs of the control strategy are: vaccination of the eligible heifers and veterinary costs. So far, preliminary results for two States were achieved: In Mato Grosso and São Paulo, the prevalence of seropositive animals was 10,25% (2003) and 3,81% (2001), respectively. From this information, the evaluation period until a prevalence of 2% is reached and the benefit-cost ratio were calculated. Considering 70%, 80% and 90% of the vaccination of heifers, the evaluation period were 27, 24, 22 years and the ratio between benefit cost ratio of control strategy and the base-case was between 1,005-1,095 (optimist and pessimist scenario, respectively) in Mato Grosso State and 14, 13, 11 years and the ratio between benefit cost ratio was between 1,003-1,011 in São Paulo State.

Key factors for sustainability of regional animal health networks: CaribVET example

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CaribVET is a collaborative network of veterinary services, research institutes and regional/international organizations whose objective is to improve animal and veterinary public health in the Caribbean. Set up on a bottom-up process about 15 years ago, CaribVET progressively achieved recognition and was officially endorsed in 2006 by the CARICOM as the Caribbean Animal Health Network. In 2010, it expanded to 32 countries and territories and 10 regional/international organizations. Its operation relies on a Steering Committee, a Coordination Unit and 6 working groups. Efficient and coordinated set of initiatives, projects and funding from different partners, mutual trust and responsibilities handover are essential for its sustainability. Quality Assurance principles are being implemented including formalized organization, clear rules (trilingual charter), and traceability (members, data) to improve network efficiency and operation. Interaction between professionals working in research, surveillance or control allows the definition of (1) relevant research questions according to needs evidenced in the field; (2) scientifically-based recommendations/tools to improve prediction of emergence (pathogen evolution, population dynamics); disease surveillance (design risk-based surveillance) and control strategies (appropriate treatment, vaccine, vector controls). Such interactions ensure implementation by decisions makers of research outputs, guarantee of sustainable improvement of animal health. These approaches contribute to network long-term operation to be complemented by cost-benefit studies and performance indicators development to gain advocacy of policy makers at the highest level of country members, about the essential role of CaribVET to support national networks and improve their prediction, prevention and control capacities.