A knowledge exchange framework for the monitoring and control of paratuberculosis on Scottish farms

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Multiple barriers exist to effective disease control. Among these is a perception that control attempts are futile due to unrealistic or rigid guidelines that may not be feasible or cost effective for all farms. The aim of the PARABAN project is to develop a framework for effective knowledge exchange amongst all stakeholders involved in the reduction of bovine paratuberculosis on Scottish farms and so leave a lasting legacy of best practice for other disease mitigation programmes. Paratuberculosis is an insidious disease of considerable economic impact to Scottish industry. On-farm control is difficult due to its long incubation period and because the disease is frequently spread by subclinically infected animals. Control is best achieved by the removal of infected animals from the herd to prevent further spread yet diagnostic tests may fail to detect early infected cases. Frustration may ensue when infected animals are identified in the herd after years of implementation of gold standard interventions at considerable expense and effort for the farmer. Eight Scottish farms are participating in this longitudinal study. For each farm, the feasibility of the implementation of best practice advice is assessed by all involved in the chain from farm to research (farmers, vets, health scheme providers, laboratories, researchers and recognized experts). Decisions are ultimately made by the farmer and their vet and interventions implemented whilst the prevalence of paratuberculosis on the farms is monitored. Adaptations to control measures are made as necessary whilst the process of knowledge exchange is constantly assessed and refined. The development of a multi-way forum offers a dynamic and adaptable approach to disease control and may be key to the success of disease mitigation programmes.