

# Farmers' attitudes to Bovine Tuberculosis Control in Northern Ireland



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## Introduction

- Bovine tuberculosis (TB) is endemic in Northern Ireland and its control has important financial consequences.
- It is important for Government to have an understanding of farmers' views in relation to their TB control as it can make a valuable contribution to the policy decision making process.

## Materials & Methods

- A retrospective, observational case-control study was conducted in 2010 to 2011 in county Down, Northern Ireland, an area with high TB incidence.
- Case herds (117) were herds with recent TB breakdowns and control herds (75) were herds which didn't suffer a recent TB breakdown.
- Participation rate was 37.4% for case herds and 32.4% for control herds.
- Farmers were presented with 22 statements in relation to their attitude towards TB / TB control and their level of agreement was measured using the Likert Scale.
- Mann-Whitney and Kruskal-Wallis were used to test for differences in mean rank of agreement scores between cases/controls and different age categories.

## Results

- Case farmers were significantly more in support of allowing badgers to be vaccinated on their land ( $P=0.005$ ) and in problem areas ( $P=0.037$ ) and receiving additional advice on measures to prevent TB ( $P=0.027$ ) (Table 1).
- Younger farmers (<60 years) were significantly more in agreement with the statement that a badger cull would damage the public image of agriculture in Northern Ireland ( $P=0.011$ ) and farmers < 40 years old were significantly more willing to pay for badgers to be vaccinated on their own land ( $P=0.004$ ) (Table 1).
- Farmers showed stronger support for badger vaccination (55.2%) compared to badger culling (25.5%) as a potential TB control strategy (Figure 1).

## Conclusion

The participating farmers showed strong support for the presented cattle-related TB control measures and both vaccination and culling of badgers (with vaccination being the preferred method of badger intervention). Farmers showed the highest disagreement with the statements which queried their willingness to pay for TB control measures.

Although generally there was consensus in attitudes from farmers that had recently suffered a TB breakdown compared to farmers without a recent TB breakdown and also between the different age groups of farmers, there were some significant differences between attitudes as well as outlined in the results section.

Statement	% agreed	Case vs. Control Sign.	Age Sign.
TB control is important.	81.3%	0.137	0.067
Current TB controls adequate.	62.0%	0.776	0.523
<i>Information on TB control</i>			
- Enough info on TB control	81.8%	0.641	0.128
- Welcome additional advice	57.6%	0.027	0.813
- Welcome advisory visit	45.3%	0.759	0.994
<i>Biosecurity</i>			
- Biosecurity measures can make a difference.	67.7%	0.363	0.964
- Prepared to take BM in the future.	68.2%	0.748	0.240
- Isolation of inconclusive animals essential.	80.2%	0.687	0.759
Support greater use of the <i>IFN<math>\gamma</math></i> test	64.6%	0.791	0.103
<i>Pre-movement testing.</i>			
- In favour of the introduction of pre-movement testing	52.6%	0.821	0.193
- Willing to pay for pre-movement testing.	17.2%	0.670	0.737
<i>Badger cull:</i>			
- Opposed to badger culling	20.3%	0.392	0.437
- In favour in problem areas	86.5%	0.708	0.518
- In favour on problem farms	81.8%	0.384	0.212
- Allow badger cull on own land.	79.2%	0.076	0.604
- Willing to pay for badger cull on own land.	20.3%	0.495	0.152
- Concerned about public opposition to culling	38.0%	0.343	0.141
- Badger cull would damage image of agriculture	35.4%	0.387	0.011
<i>Badger vaccination:</i>			
- In favour of badger vaccination in problem areas	81.8%	0.037	0.848
- Allow badger vaccination on their own land.	89.6%	0.005	0.661
- Willing to pay for badger vaccination on own land.	18.8%	0.303	0.004

Table 1: Percentage agreement with presented statements

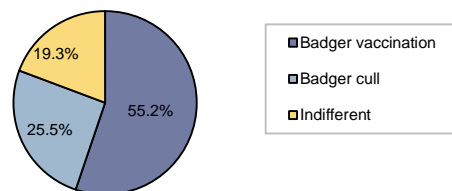


Figure 1: Farmers' preferences in relation to badger intervention for bTB control

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