



# Psychosocial factors associated with bovine viral diarrhoea control

Naomi Prosser<sup>1</sup>, Martin Green<sup>1</sup>, Eamonn Ferguson<sup>2</sup>, Michael Tildesley<sup>3</sup>, Edward Hill<sup>3</sup>, Matt Keeling<sup>3</sup>, Jasmeet Kaler<sup>1</sup> <sup>1</sup>School of Veterinary Medicine and Science, University of Nottingham, Sutton Bonington Campus, Leicestershire, LE12 5RD, <sup>2</sup>School of Psychology, University Park, University of Nottingham, Nottingham, NG7 2RD, <sup>3</sup>Zeeman Institute (SBIDER), Mathematics Institute, University of Warwick, Coventry, CV4 7AL

## We investigated how psychosocial factors were associated with farmer bovine viral diarrhoea (BVD) control behaviours

- Survey completed by 475 UK cattle farmers
- Multiple validated measures to assess psychosocial & behaviour change factors:
  - Altruism
  - Trust
  - Psychological proximity (feeling close to another person)
  - Behaviour change factors from COM-B theoretical framework
- Latent class analysis to group farmers by BVD control behaviours
- Multinomial logistic regression to test for associations between the psychosocial & behaviour change factors & BVD control classes



Many psychosocial & behaviour change factors were associated with BVD control - these have implications for achieving BVD control & eradication

#### Farmer split into 5 BVD control classes: Associated factors:

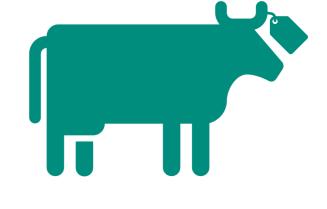
Do nothing

Baseline comparison group in multinomial model



Vaccinate

Motivated to control disease



### Take care introducing new cattle

Buy from BVD-free herds & test/isolate on arrival

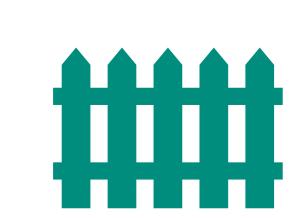
Farming community-minded & trusting



#### Do many things

Take care introducing new cattle Vaccinate

Keep cattle separate from other cattle



#### Separate herd

Closed herd

Keep cattle separate from other cattle

- Feels close to vet
- Does not trust other farmers
- Motivated to control disease
- Does not trust other farmers
- Understands how & why to control disease
- Enough time & money to control disease

This work is published in:

Prosser, NS, Green, MJ, Ferguson, E, Tildesley, MJ, Hill, EM, Keeling, MJ, Kaler, J (In Press) Cattle farmer psychosocial profiles and their association with control strategies of bovine viral diarrhea, Journal of Dairy Science. https://doi.org/10.3168/jds.2021-21386



