

# Herd-level risk factors for on-farm mortality in suckler herds: a questionnaire study

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## OBJECTIVE

Identify herd level risk factors that contribute to high beef herd mortality rates

## HERDS

Estonian beef farms having at least 10 animals per year in 2013-2016

**Within-herd mortality rate (MR) for years 2014-2016**  
 (Estonian Registries and Information Board data)

**Calves (1 day to 3 months)**  
**Adult cattle (over 32 months)**

## QUESTIONNAIRES

On-line or postal questionnaires sent to 676 farmers in May 2017

48 mostly multiple-choice questions about calf and cow management, housing and feeding

Herds contacted three times

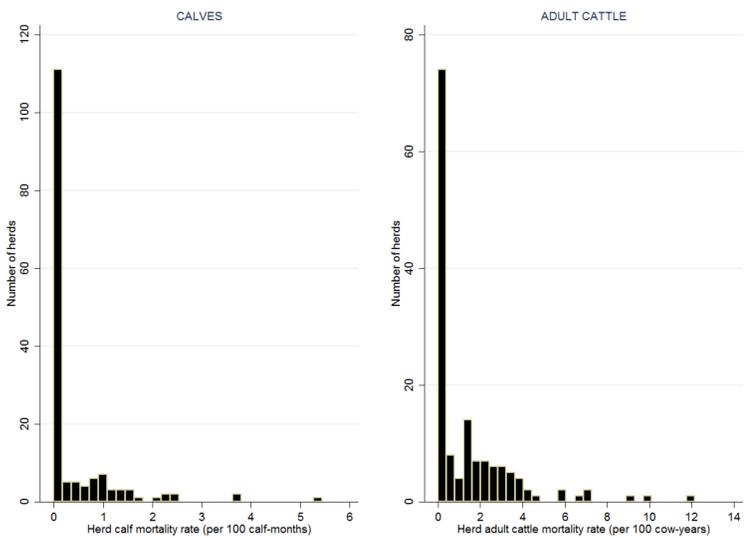
## STATISTICS

Negative binomial regression analyses

Within-herd MR (years 2014-2016) as an outcome variable

Questionnaire data as predictor variables

M & M



**Figure 1.** Distribution of within-herd calf (n=156 herds) and adult cattle (n=146 herds) mortality rates over 2014-2016 in Estonian beef herds

## CONCLUSIONS

- **More frequent supervision of calvings, better calving environment and separating sick animals** was essential to keep the mortality rate low
- Herds having problems with calf mortality might also benefit from **timing calving into warmer summer months**.
- **Farmers' motivation to acquire information about cattle health and animal husbandry** seem to influence the complex problem of mortality.
- Further studies should concentrate on factors improving herd health and animal welfare especially in **larger farms** and **herds raising mostly intensive beef breed animals**

DESCRIPTIVE STATISTICS

## RESPONSES

Response rate **25.4%**  
 Representative regarding herd size and location

## WITHIN-HERD MORTALITY RATES

(Figure 1)

**Calves MR = 0.0-5.5 per 100 calf-months**  
**Adult cattle MR = 0.0-12.2 per 100 cow-years**

RISK FACTORS

## CALVES UP TO 3 MONTHS

- Not checking calvings at night-time
- Not adding bedding to calving environment every day
- Higher proportion of calvings outside the summer period
- Herd including >50% of cattle of Limousin/rarely represented breed animals
- Larger herd size
- Farms not using consultancy service
- Conventional herd type compared to organic production

## CATTLE OVER 32 MONTHS

- Not separating sick animals
- Herd including >50% of cattle of Limousin breed
- Larger herd size

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