

# Investigation of preventative healthcare and management practices in Standardbred breeding on Prince Edward Island

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## Introduction

Preventative care practices directly influence foal survival, broodmare welfare, and farm productivity. Although these practices—such as vaccination, deworming, and diagnostic testing—are well-established in equine medicine, their actual adoption by Standardbred breeders on Prince Edward Island (PEI) has never been systematically measured<sup>1</sup>. Previous outbreaks of diseases such as Equine Viral Arteritis (EVA) highlight significant risks associated with inconsistent preventative care<sup>2,4,5</sup>. Limited or incomplete implementation of these measures may adversely affect animal welfare, reproductive efficiency, and economic outcomes for breeders<sup>1,3</sup>. Additionally, little is currently known about the demographic and herd factors influencing breeders' decisions to implement specific practices. Given the potential welfare and economic impacts, this survey aims to quantify the uptake of key preventative practices among breeders and identify demographic factors influencing these practices.



## Methodology

### Data Collection

- Survey conducted from May to July 2025
- Sample: 39 active Standardbred breeding farms on Prince Edward Island
- Survey consisted of 40 questions
- Topics covered: breeder demographics, herd management, vaccination, deworming, diagnostic testing, and biosecurity practices
- Surveys administered in person or by phone to ensure accessibility
- Participation was voluntary and anonymous

### Data Analysis

- Responses included yes/no and open-ended questions
- Quantitative analysis performed on structured yes/no responses
- Qualitative analysis conducted on open-ended responses

## Results

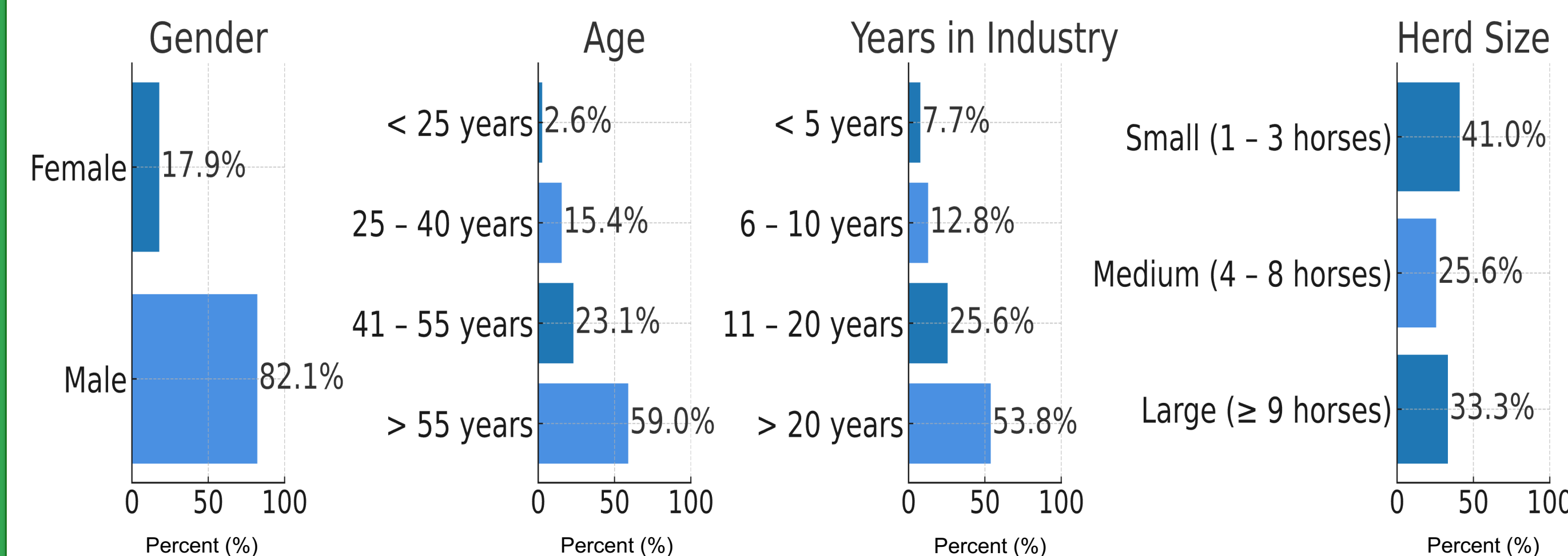


Figure 1. Percent (%) distribution of respondent characteristics (n = 39).

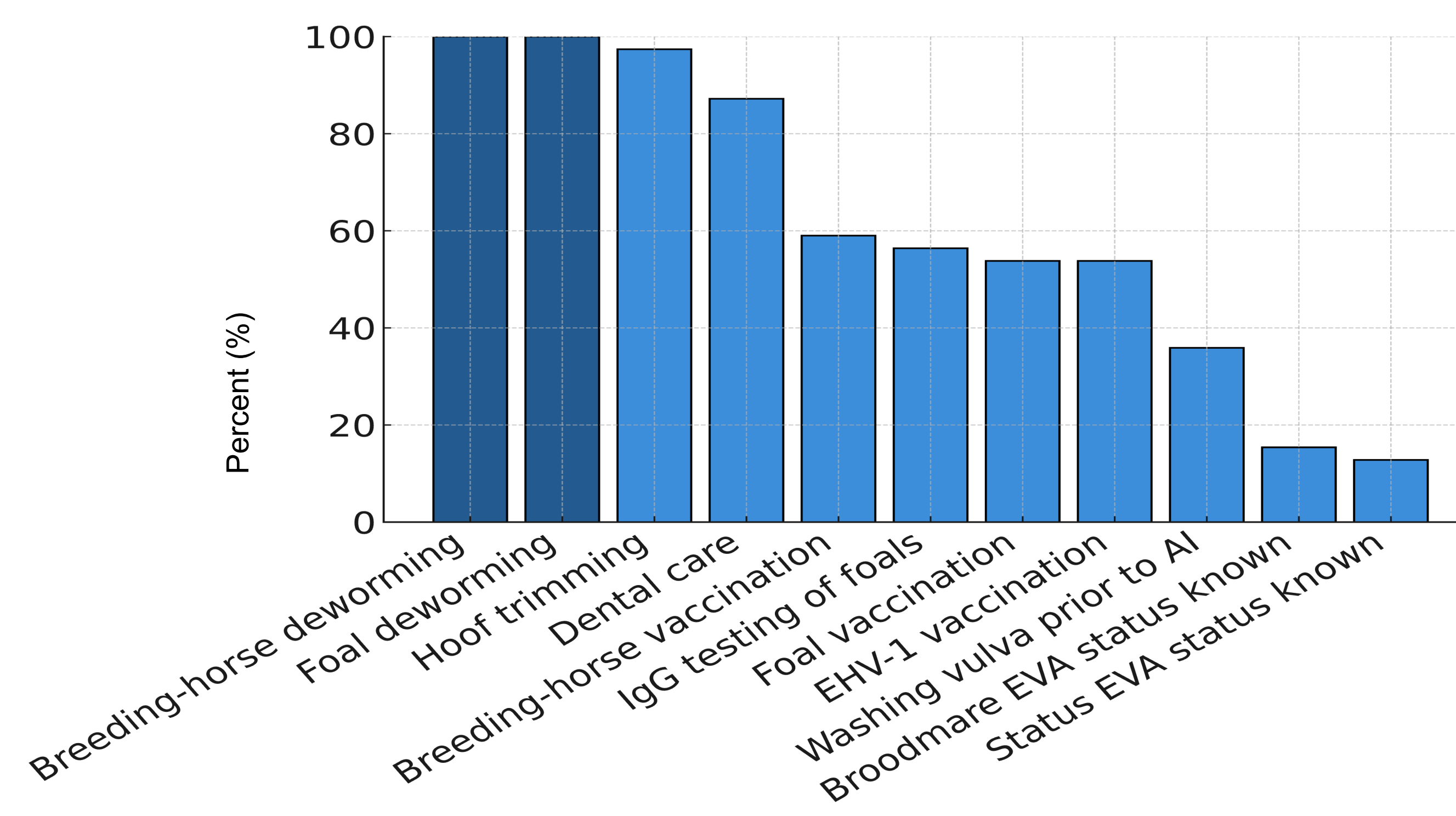


Figure 2. Proportion of breeders implementing each key preventative practice. Data are shown as the percentage of respondents reporting uptake.

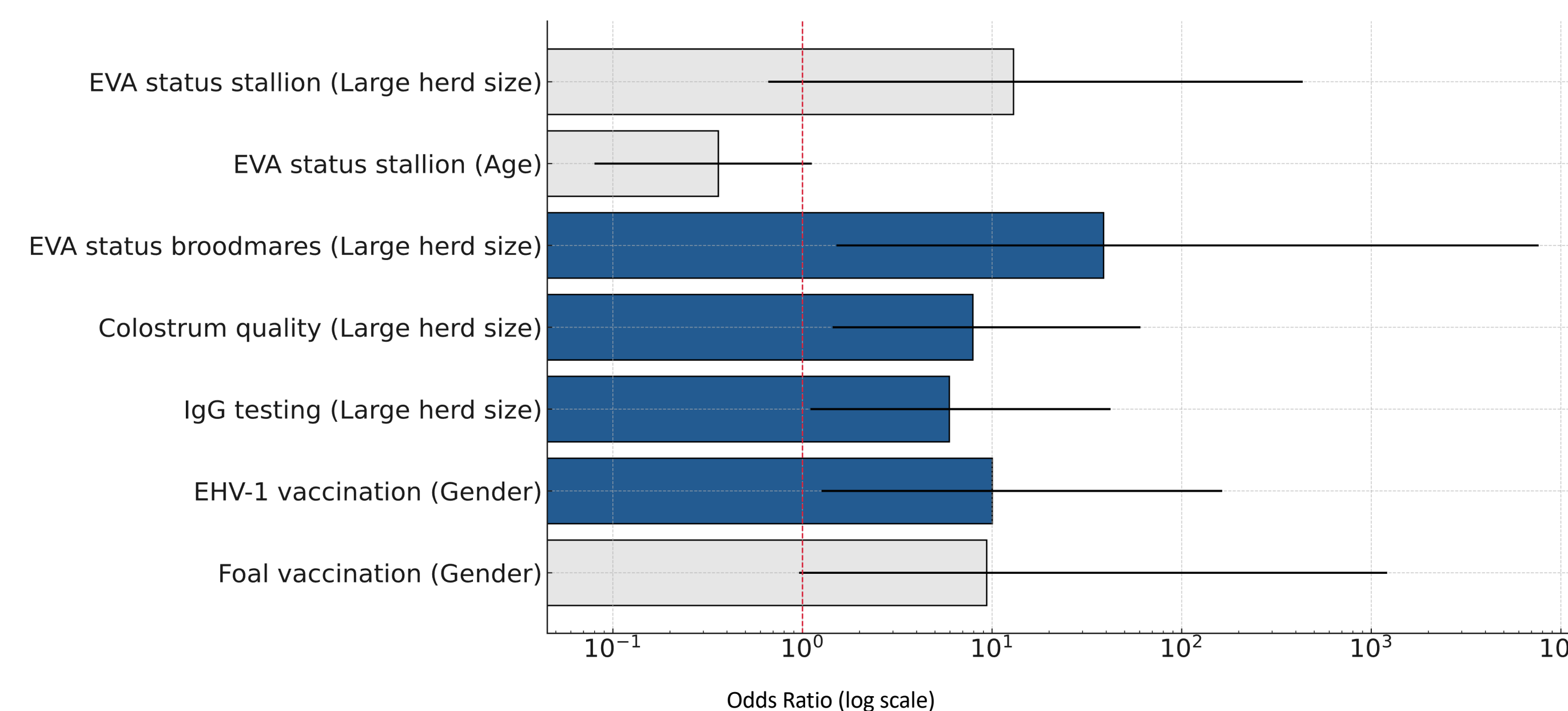


Figure 3. Odds ratios for significant predictors of preventative practices. Blue bars indicate statistically significant predictors ( $p < 0.05$ ); gray bars are not significant. Error bars represent 95% confidence intervals. The red dashed line indicates no association (odds ratio = 1).



## Discussion

### Preventative Practices

- Deworming and hoof trimming widely practiced
- Colostrum checks, IgG testing, and post-foaling vet checks less consistent
- Broodmare and foal vaccination, including EHV-1, below 60% adherence
- Vaccinated farms showed fewer abortions and dystocias, encouraging wider adoption

### Demographic Influences

- Female breeders more likely to vaccinate foals and for EHV-1
- Large-scale breeders more likely to use preventative care
- Mid-career breeders (6–10 years) less likely to vaccinate or test IgG
- "Not necessary" cited as barrier, suggesting knowledge gaps over finances

### Recommendations

- Highlight clear reproductive and health benefits of vaccination/testing
- Conduct larger studies to confirm findings
- Share findings in breeder-friendly formats
- Promote welfare-focused decision-making

## References

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