

Ovine lameness in Ireland – An assessment of farmer management practices via survey

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Overview

Introduction

Materials
and Methods

Results

Conclusion



Introduction

- Ovine lameness is both a production and welfare impacting condition
- Infectious lameness accounts for over 80% of lameness cases in the UK and is present on over 95% of farms
- Currently a paucity of information within Ireland regarding lameness:
 - Infectious lameness type and prevalence within flocks ?
 - Farmer control and prevention methods ?
- Create evidence based research on lameness control, prevention and treatment protocols for the Irish sheep industry



Irish mid-season lowland sheep systems

- 2.56 million breeding ewes across over 34,000 flocks
- Predominantly grass based system
- Concentrate supplementation kept to a minimum
- Sheep remain outdoors until winter (housed)
- Average yearly lamb weaning rate – ~1.3 lambs/ewe
- ~ 23% ewe replacement rate



Objective

To quantify infectious lameness prevalence and knowledge within the Irish sheep industry and identify the management methods which farmers are employing on farm to prevent, control and treat lameness on farm



Methodology

- Survey consisting of 59 questions (pictorial, open and closed type) designed to collect information on:
 - Farmers self-reported on-farm lameness prevalence
 - Farmers ability to recognise lameness lesions
 - The methods utilised by farmers to prevent and control cases of lameness on farm



Data Collection/Interpretation

- Responses from 248 'Lowland' farmers were analysed
- Survey live January 2023 – June 2024
- Hybrid delivery of survey:
 - In-person distribution at Teagasc knowledge transfer events (Farmer knowledge transfer conferences/open farms days etc.)
 - Online promotion/distribution of the survey via on Teagasc social media (responses collected via 'SurveyMonkey')
- Data was analysed using RStudio

Results

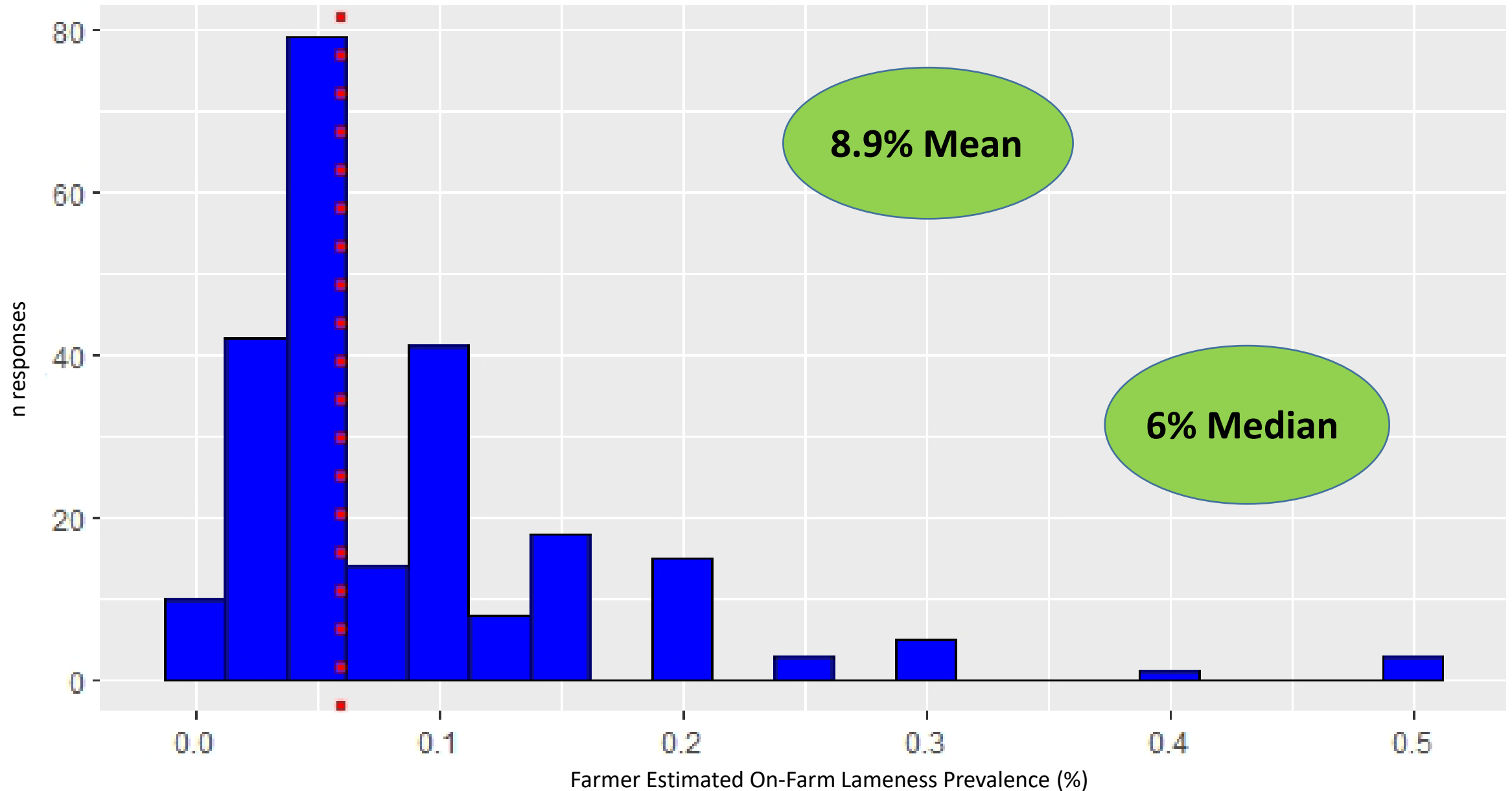
- Farm Description -

- Mean flock size – 187 ewes
 - Median – 120 ewes
 - National average – 108 ewes
- Mean farm size – 51 hectares
 - Median – 40 hectares
 - National average – 44 hectares

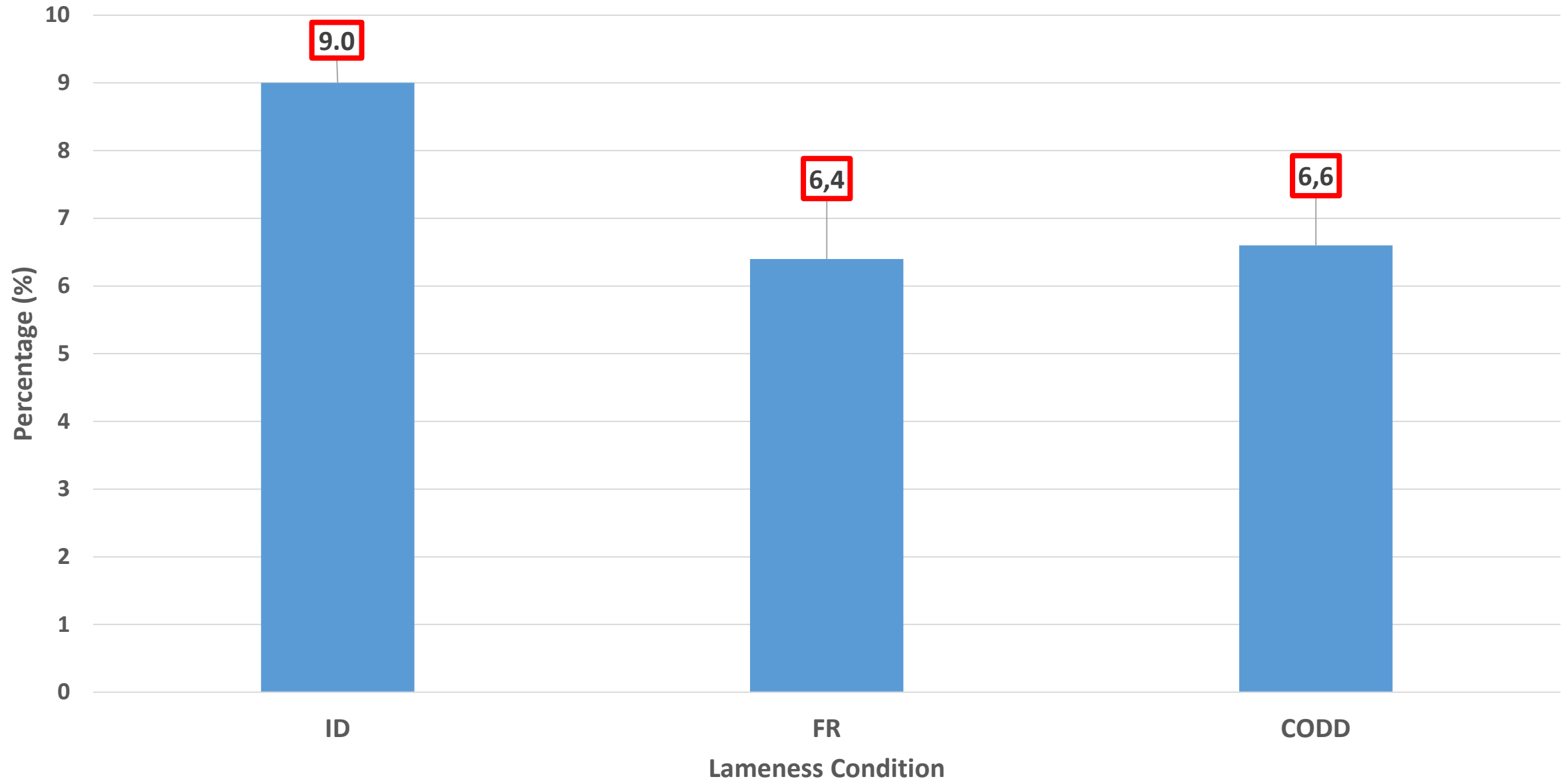
Reponses - 248



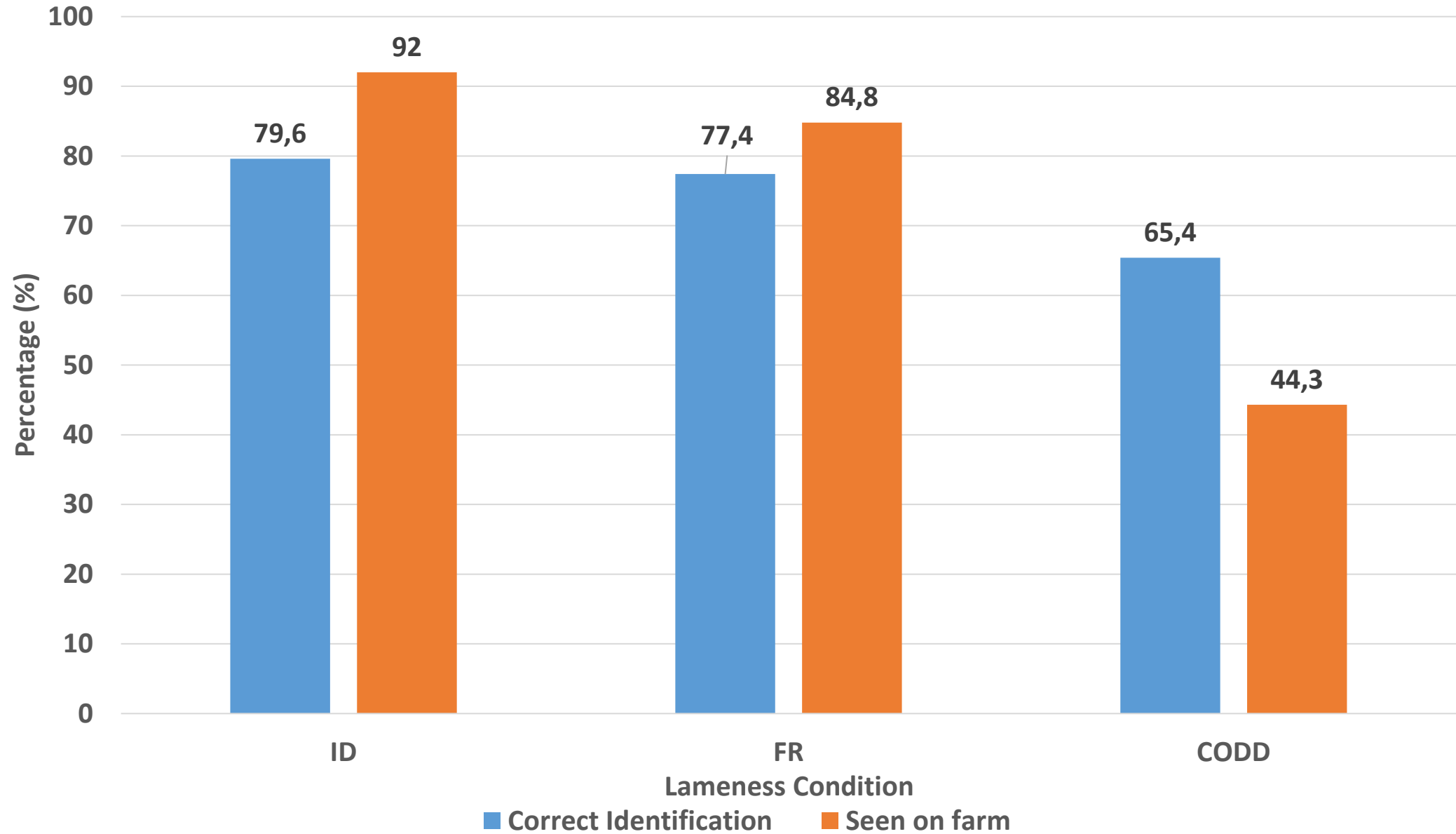
Whole Flock Farmer Reported Lameness %



Mean on Farm Infectious Lameness Prevalence

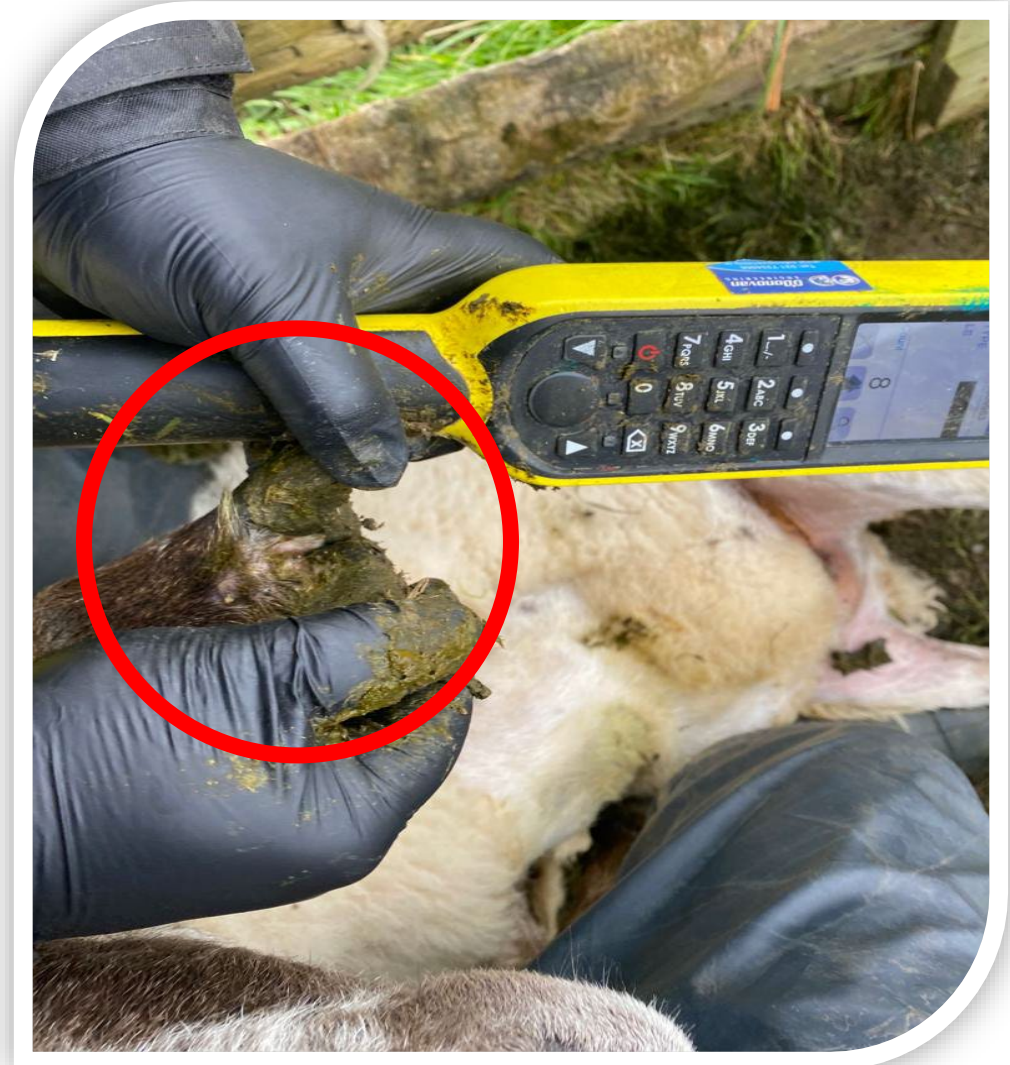


Lesion Identification and Presence on Farm

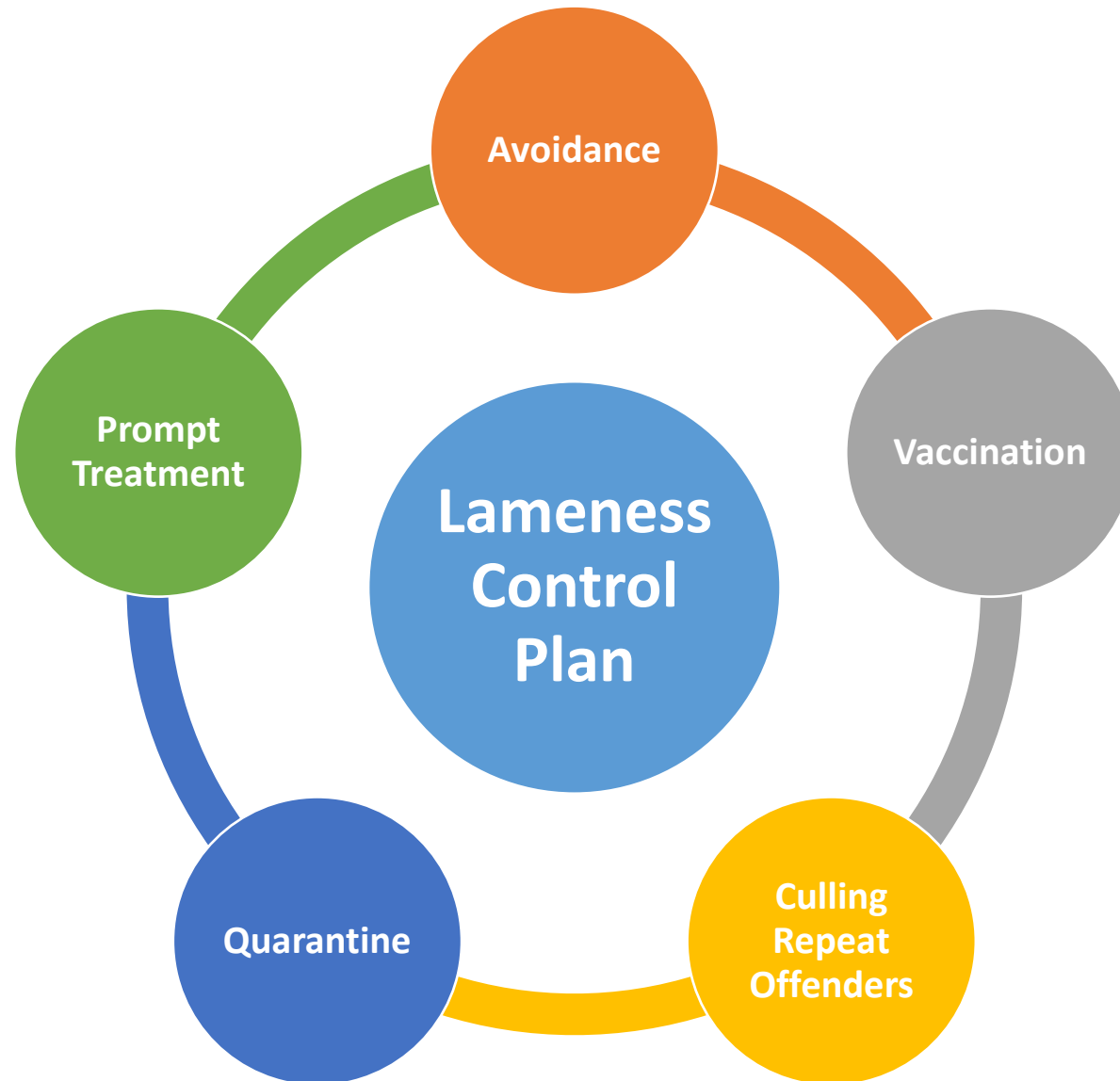


Lesion Identification – Survey Insight

- 85.0% of respondents reported to ‘turning over’ the sheep when administering treatment (95% CI: 80.5, 89.4)
- Correct identification of a lameness lesion is key to its correct treatment and control



The 5 point plan (Clements and Stoye, 2014)



Survey Respondents Insights

Avoidance

- 18.6% of respondents 'never' footbath sheep (95% CI: 13.3, 23.9)
- 37.8% of respondents 'didn't know' footbath concentration (95 CI: 30.2, 45.4)
- 8.7% of respondents released sheep back to the field immediately after foot-bathing (95% CI: 4.5, 12.9)
- 51.7% of respondents reported to routinely trimming sheep's feet

Prompt Treatment

- 56.5% of respondents detailed observing sheep while grazing to detect lameness (95% CI: 50.3,62.7)
- 69.2% of respondents reported to treat a lame sheep within 1 week (95% CI: 63.4,75.0)
- Farmers that delay treatment for + 1 week are more likely to have CODD on farm $P < 0.05$.

Culling

- 20.1% of respondents reported that they would never/be unlikely to cull a sheep due to lameness (95% CI: 14.7, 25.5)

Quarantine

- 48% of respondents reported to buying in replacement females/store lambs yearly
- Farms that purchase replacement females/store lambs are more likely to have CODD on farm $P < 0.05$

Vaccination

- 16.2% of respondents reported to be vaccinating against FR (95% CI: 11.2, 21.2)

Conclusions

- Within flock lameness prevalence is significantly above the target figure
- The majority of farms experiences cases of lameness every year
- CODD is now present on a vast proportion of Irish farms
- Implementing effective quarantine measures on farm is vital to avoid the importation of infectious lameness diseases
- Prompt treatment is vital to both minimise the potential welfare impact and limit disease progression



THANK YOU FOR YOUR ATTENTION
ANY QUESTIONS ?

