Farmers' motivations underlying biosecurity practices

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Context

- “Barriers to preventative herd health planning in dairy sector”
  - What farmers do & **Why?**
- Dairy sector – most profitable and progressive

- Stratified survey – results weighted to population
- Findings across series of topics
  - Results Ireland-specific but trends have wider relevance
- Veterinary as much about people as animals

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Biosecurity: Transport/ Visitors /Quarantine

- Animal transport – disinfection of hired transport
  - ⅓ - yes: ⅔ no

- Disinfection by farm visitors/contractors
  - Vets – 70%
  - Others – 27-58%

- Quarantine guidelines 28 days – just 5%

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Biosecurity – priorities

Rating biosecurity practices as of “High Importance”	%
Preventing contact between herds	85
Use of preventive medicine and vaccination	66
Preventing contact between the herd and wildlife	57
Disinfection by visitors/contractors	56

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Biosecurity – underlying motivations

Most important factors that motivate approach to biosecurity practices?	%
to prevent herd health problems from developing	81
Financial benefits from a healthier herd	72
Good biosecurity reduces the need for veterinary care	67
I take pride in maintaining a healthy herd	29
helps me feel that farm is being managed to high standard	16
Good biosecurity gives me personal satisfaction	9



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Biosecurity – underlying motivations

Foremost in your mind when you hear about new guidance recommending greater biosecurity on farms?	%
Difficulty of implementing biosecurity measures	56
The additional financial cost	49
Whether additional bio-security measures make a practical difference	44
That minimising biosecurity risk justifies the cost	14

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Milk recording, managing & controlling mastitis

Is milk recording carried out on your farm?	%
Yes, on a regular basis	56
Yes, a few times during year	21
No	23

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Dry-cow therapy

	%
Used selective approach, either antibiotic-based or just teat sealer, depending on the cow	58
Used blanket antibiotic based dry-cow therapy	32

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Blanket approach – antibiotic dry-cow therapy (32%)

Factors influencing approach to drying-off cows	%
Treating all drying-off cows with antibiotic has always worked well for me	95
Treating all drying-off cows with antibiotic reflects good herd management	40
My vet advises me to use this approach	30
Treating only high-risk cows with antibiotic would increase mastitis cases	27

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Selective approach – dry-cow therapy (58%+)

Factors influencing approach to drying-off cows	%
Selective dry cow therapy helps reduce antibiotic use	73
I am confident in identifying which cows require antibiotic treatment	62
Selective dry cow therapy is considered best practice	47
I have had positive experiences using selective dry cow therapy	44

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Antibiotic use

Factors that would motivate you to reduce antibiotic use on your farm	%
More support or guidance from my vet.	50
Knowing that it could improve animal health & wellbeing.	49

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Vaccines

Which diseases did you vaccinate against in past 12 months?	%
Respiratory disease, e.g., Pneumonia	43
IBR (Infectious Bovine Rhinotracheitis)	64
BVD (Bovine Viral Diarrhoea)	27
Leptospirosis	71
Clostridial diseases, e.g. blackleg	71
Bluetongue	65

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Why vaccinated

- 50-60% – avoid animal illness
- 20-25% – avoid financial & vet costs
- 17-24% – high risk of disease occurring

Why didn't vaccinate

- 47-70% perceived low risk of disease occurring. 47% bluetongue, 70% BVD
- 6-23% - don't believe treatment effective
- 8-14% - cost of treatment

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Information and guidance

- Veterinary practitioners are the “go to” source for guidance across a broad range of topics – **80-90%+**

  e.g., mastitis, parasite controls, respiratory diseases, chronic diseases, nutritional deficiencies, TB

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Information and guidance

How practically useful is advice you receive about TB from:		%
My vet	Very useful	67
My farm advisor	Very useful	28
DAFM	Very useful	25
Other farmers / farming community	Very useful	32
Farming organisations	Very useful	17

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Key points

- Biosecurity: social/behavioural as important as the science

- All decisions/actions are not rational
- Challenging to classify actions by farmer traits
  - e.g., age, herd size, etc.
- Key stakeholders – vets & farmer “Discussion Groups”

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