Topic	Topic
Animal welfare	Technical efficiency

PREVENTION: GOOD PRACTICES AND BIOSECURITY

Background

Biosecurity is a set of structures, tools and best practices (management and behaviour) that prevents the entrance of pathogens and/or prevents their circulation. Therefore, to achieve effective prevention, a robust biosecurity plan is needed, with the objective of reducing the need for antimicrobials.

How does the strategy work + Equipment involved

GENERAL PRINCIPLES

EXTERNAL BIOSECURITY

Prevent the entrance of diseases from outside, through perimetral fencing, quarantine, filter areas for people and vehicles, internal movements. Measures include:

- **Visitors' procedures**
- **Vehicles procedures**
- **Prevention of contact with other wild/domestic animals**
- **Management of purchase of animals**
- **Quarantine**

INTERNAL BIOSICURITY

Limit the circulation of pathogens within the farm, through:

- **Management of ill/injured animals**
- **Management of calving**
- **Herd management**
- **Mastitis control plan**
- **Control plan of infectious diseases (vaccination, elimination of infectious heads) and of parasites**
- **Hygiene of the barn**
- **Hygiene of the milking parlour**
- **Colostrum management**

Specific advises

To define and implement an effective biosecurity plan you have to:

- Be aware of the sanitary situation of the farm, by regularly monitoring the frequency of diseases
- Be aware of the epidemiological situation of your geographical area
- Assess structures on farm in order to define customised and proper strategies
- Evaluate potential innovations in terms of cost and benefit
- Coordinate with your vet
- **The simpler a plan is, the more it will be realistically applicable!**
- **Constant education and training of workers**
- **and efficacy of signs are essential!**

Positive features

- *Potential reduction of antimicrobials, with positive impact on antimicrobial resistance*
- *Cost and benefit analysis is favourable*
- *Strong linkage with animal welfare: to invest in animal welfare impacts positively on animal resilience towards pathogens*

Be careful, especially on these points

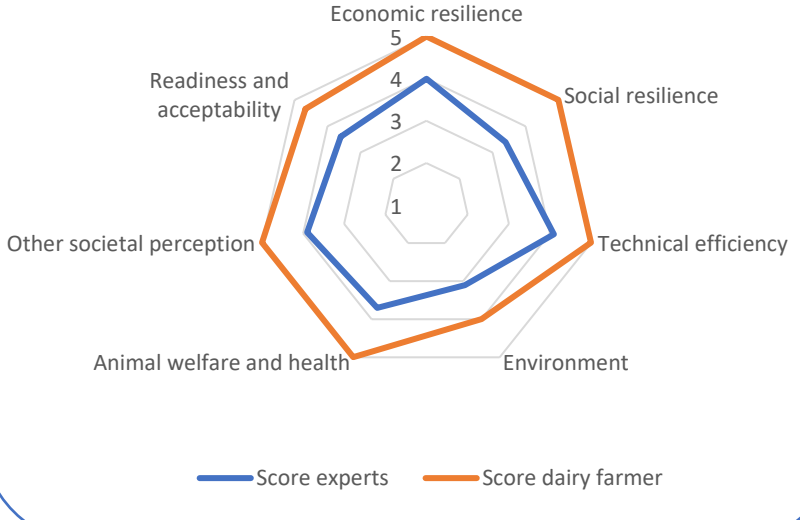
Transmission of diseases (virus, bacteria, parasites) can occur in 2 ways.

1. **Direct contact** with an infected animal

2. **Indirect contact,** e.g. via ingestion (water, feed, colostrum) or inhalation or through faeces and urine; via vectors such as: people, other animals (e.g. rodents, insects, wild/domecstic animals), equipment (e.g. tools to administrate feed or water, to remove effluents, …), medical equipment (e.g needles).

Quote of a farmer:
"Small precautions can make a big difference!"

Assessment of method



More info:

- https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015XC0911(01)
- Biosecurity in animal production and veterinary medicine (Dewulf and Immerseel, 2018)

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