Theme 9: Animal Health

BIOSECURITY OF DAIRY FARMS

(Level 1)

Topic	Training & information Content
9.1	Introduction to Animal health (Prevention vs curative health care)
9.2	Health signals
9.3	Biosecurity of dairy farms
9.4	Tick born diseases (Prevention and treatment)
9.5	Worm infections (Prevention and treatment)
9.6	Vaccination schedule and planning
9.7	Mastitis prevention and treatment
9.8	California Mastitis Test
9.9	Usage and storage of veterinary medicines on dairy farms
9.10	Administering of medicines to dairy cows
9.11	Instruction use of injectors into teat canal
9.12	Key performance indicators (KPIs) for monitoring health status of dairy herd

1. You will learn about (learning objectives):

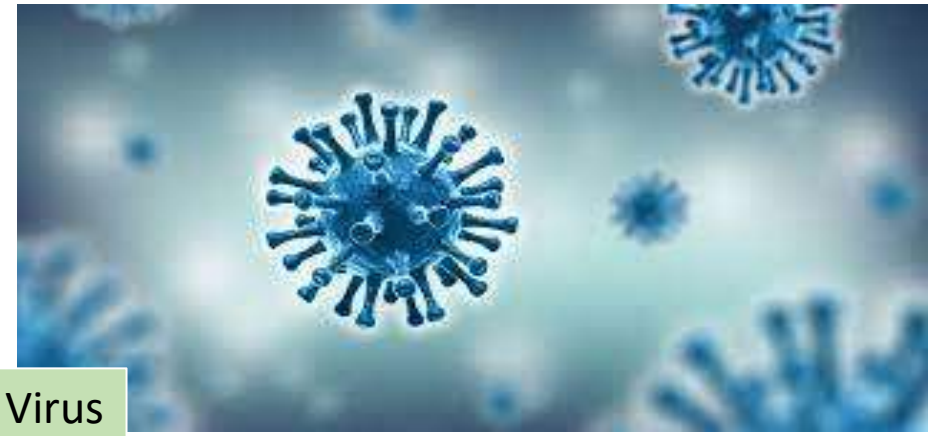
- ❑ Biosecurity and its importance.
- ❑ How to implement biosecurity measures?
- ❑ The effect of biosecurity measures.

2. Introduction

What is biosecurity?

- Measures taken at the farm to decrease the risk on diseases caused infectious agents.

Foreign (Dutch) traffic sign to stop!



Virus

3. Pathogenic microorganisms

Which agents can cause diseases?

- Bacteria and rickettsia
- Viruses
- Protozoa
- Fungi
- Worms

East Coast Fever is caused by aprotozoa

Tongue

Foot and mouth disease is caused by a virus

Mastitis is caused by bacteria

4. Classification of biosecurity

Biosecurity is about;

- Make sure diseases do not enter your farm. This we call external biosecurity.
- Make sure diseases do not spread. This we call internal biosecurity.

- Definition: Biosecurity is doing things to decrease the number of diseases at the farm.

Udder washing (internal biosecurity)

Disinfecting an entering car (external biosecurity)

5. Biosecurity and Infection pressure

- The less ticks, the less chances on tick borne diseases.
- The less bacteria, the less chance on mastitis and calf scour.
- The less viruses, the less chances on viral diseases like foot and mouth disease.

The more the ticks, the higher the chances of tick borne diseases

The cleaner the udder, the smaller the chances of udder infection (mastitis)

6. External Biosecurity

- External biosecurity is to prevent diseases coming into your farm.

Dirty gumboots can carry bacteria

Good fencing can protect you from goats bringing in tick borne diseases

At cattle markets foot and mouth disease can easily spread

7. Closed farm

- Animals spread diseases.
- If no animals come into the farm, the less chance of diseases.

Sires are known to spread veneral diseases e.g., Brucellosis.

A gift can be a risk

8. Quarantine

- When an animal comes into the farm, keep it two weeks separate to look if it is healthy.

FMD gives the government reason to set quarantine measures

Cattle brought to market in Uganda despite quarantine rules in 2018

Source: Ugandaradionetwork

Not only adult cattle are a risk

8.1 Quarantine Cont'd: Other animals

- Other animals can also transfer/spread diseases to cattle.

Goats can be a reservoir for tick borne diseases

Goats can also transfer worm infections

Goats can spread Brucellosis

8.2 Other animals Cont'd…

9. Internal biosecurity

- Internal biosecurity is to make sure diseases do not spread on the farm.

Clean milk equipment helps to prevent mastitis

Washing your hands helps to reduce spreading viruses and bacteria

Manure contains a lot of bacteria. Cleaning gumboots will prevent spreading them.

9.1 Internal biosecurity Cont'd…

- Work clean.
- Vaccinate.
- Treat sick animals.
- Keep cattle separate from goats and sheep.

Vaccination helps to reduce infection pressure

Separating sick animals helps to prevent spreading of the disease

Disinfect navel directly after birth

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