Veterinary Science
Preparatory Training for the Veterinary Assistant
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Prevention

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Objectives

- Discuss management practices targeted toward sources of diseases
- Discuss management practices targeted toward transmission of diseases
- Discuss management practices targeted toward resistance and immunity of animals against diseases
Preventive Practices

- Biosecurity
  - Foster optimal health and welfare
  - Enhance productivity and economic efficiency
  - Ensure abundant, safe, and wholesome food

- Practices
  - Nutritional Management Practices
  - Husbandry Management Practices
  - Epidemiological Management Practices
Disease Transmission

- Epidemiology – study of the transmission of diseases

Means of Transmission

- Direct transmission
  - Direct of close contact
- Indirect transmission
  - Vectors
  - Vehicles
  - Environment
Animal Disease Management (Biosecurity)

Epidemiology

Transmission (Risk Assessments)
- Diseased Animal (Reservoir)

Control (Risk Manipulations)
- Infected Animal (Carrier)
- Latent Animal (Carrier)
- Agent Recrudesces (Stress)
Direct Sources
- Aerosol Droplets
- Nasal Fluids
- Ocular Fluids
- Saliva
- Skin
- Milk
- In Utero
- Genital Fluids

Indirect Sources
- Vectors, Vehicles
  - Blood
  - Skin
  - Ocular Fluids
  - Nasal Fluids
  - Environment
    - Aerosol Droplets
    - Nasal Fluids
    - Manure
    - Urine
    - Fetal Fluids
    - Carcass
<table>
<thead>
<tr>
<th>Entry Routes</th>
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Epidemiological Management Practices

- New animals
  - Prior to entry
    - Testing
    - Vaccinations
  - On entry
    - Quarantine
Nutritional Management Practices

- Poor nutrition predisposes animals to disease
- Management practices
  - Sufficient clean water
  - Adequate diet
    - Protein
    - Carbohydrates
    - Fiber
    - Minerals
    - Vitamins
    - Fats and oils
    - Forage
      - Prevent overcrowding and overgrazing
  - Newborns receive colostrum within 6 hours of birth
Husbandry Management Practices

- Poor husbandry causes problems
- Management Practices
  - Adequate space and ventilation
  - Shelter from weather
  - Sanitary conditions
  - Clean and disinfect feeding and watering devices