

Veterinary Science

Preparatory Training for the Veterinary Assistant

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FAZD CENTER

NATIONAL CENTER FOR FOREIGN ANIMAL
AND ZOONOTIC DISEASE DEFENSE



Infectious Diseases: Musculoskeletal & Nervous Systems

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Objectives

- Discuss some of the infections bacteria can cause in the muscular system
- Discuss some of the infections bacteria and viruses can cause in the skeletal system
- Discuss some of the infections viruses can cause in the nervous system
- Discuss some of the infections bacteria can cause in the nervous system
- Discuss some of the infections protozoa can cause in the nervous system
- Discuss some of the infections prions can cause in the nervous system
- Discuss some of the infections fungi can cause in the nervous system

Muscles

- Myositis – inflammation of muscle
- Necrotic myositis – death of inflamed muscle
- Toxemia – toxins in blood

Bacterial Muscle Diseases

- *Clostridium chauvoei* – blackleg
- *Clostridium perfringens* B, C, D – blackgut
- *Clostridium sordellii* – blackneck
- *Clostridium septicum* – malignant edema

- Latency – dormant spores
- Recrudescence – vegetative bacteria
 - Necrotic myositis
 - Toxemia
 - Sudden death

- Factors of recrusdesence

- Fast growth, exertion – blackleg
- Diet change, overload – blackgut
- Trauma – blackneck
- Wound – malignant edema

Bone Joints

- Arthritis – inflammation of bone joint
- Polyarthritis – inflammation of multiple joints

Viral Bone Joint Diseases

- Goats – caprine arthritis and encephalitis (CAE)

Bacterial Bone Joint Diseases

- Cattle – mycoplasmosis
- Swine – haemophilosis

Brain and Meninges

- Meningitis – inflammation of meninges (brain covering)
- Encephalitis – inflammation of brain
- Meningoencephalitis – inflammation of meninges and brain

Meningitis and Encephalitis

- Clinical symptoms
 - Depression
 - Blindness
 - Wobbling
 - Paralysis
 - Seizures
 - Delirium
 - Coma

Viral Brain and Meninges Diseases

- Rabies
- Equine encephalomyelitis
- Canine distemper
- Canine parvovirus
- Feline leukemia
- Swine pseudorabies

Bacterial Brain and Meninges Diseases

- Tetanus
- Cattle haemophilosis
- Swine haemophilosis

Protozoal Brain and Meninges Diseases

- Equine protozoal myeloencephalitis (EPM)
- Canine neosporosis
- Dogs and cats – toxoplasmosis

Prion Brain and Meninges Diseases

- Bovine spongiform encephalopathy
- Sheep scrapie

Fungal Brain and Meninges Diseases

- Dogs and cats – cryptococcosis
- Dogs and cats – coccidioidomycosis