

# Examination of the Nervous System



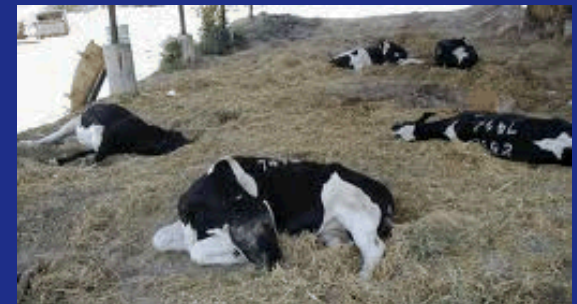
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# Examination from Afar: Nervous System

- **Information collected during an examination from a distance**
  - Mention - central versus peripheral
  - General body condition
  - Posture
  - Gate
    - Ambulatory
    - Recumbent
  - Position of head and neck
  - Facial symmetry
  - Muscular atrophy
- ❖ ***In regions where rabies is endemic – animals showing neurological signs should always be considered rabies suspects***





# Collecting a Meaningful History: Nervous System

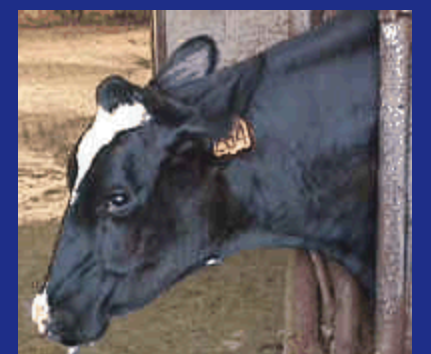
- **Historical information related to the neurological evaluation**
  - Duration of illness
  - Exposure to rabid animals
  - Food / water consumption
    - **Type**
    - **Amount**
  - Changes in feed
  - Mastication and swallowing ability
  - Vaccinations
  - Previous treatments
- **Historical information related to the herd**
  - Other animals affected
  - Duration of signs
  - Similarity of signs
  - Deaths associated with the illness
  - Changes in food and/or water
  - New additions to the herd



# Examination: Nervous System

## Head and Neck

- **Mentation – central versus peripheral**
  - **Facial symmetry**
    - Cranial nerve evaluation
      - Olfactory, optic, oculomotor, trochlear, trigeminal, abducens, facial, vestibulochochlear, glossopharyngeal, vagus, spinal accessory, and hypoglossal
      - Which of the cranial nerves can we assess during an exam?
  - **Oral cavity**
    - Excessive salivation or food materials
    - Chewing motion
  - **Head and neck**
    - Position
    - Movement, pain
- ❖ ***Always wear gloves if rabies cannot be ruled out***







# Examination: Nervous System

- **Gait**

- Lameness
- Proprioceptive deficits
- Circling
- Leaning posture

- **Reflexes**

- Difficult in large animals
- Patellar – sheep and goats

- **Pain response**

- Panniculus

- **Muscular weakness/atrophy**

- **Ability to pass urine and feces**

- **Rectal palpation**

- Rule out pelvic fracture





# Interpretation of Results: Nervous System

- **Abnormal findings: central versus peripheral**
- **Abnormal findings: nervous system**



# Ancillary Tests: Nervous System

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- **Cerebrospinal fluid analysis**
  - Ensure that rabies is no longer on the list of possible diseases
- **Response to therapy**
  - Otitis media
  - Parasites
- **Rabies diagnosis – PCR, Histology**
- **Hematology**
- **Radiography in small ruminants**