Infectious Diseases:
Special Senses & Generalized Conditions

Floron C. Faries, Jr., DVM, MS
Objectives

- Discuss some of the infections bacteria can cause in the eyes of animals
- Discuss some of the infections bacteria can cause in the ears of animals
- Discuss some of the generalized infections systemic bacteria can cause in animals
- Discuss some of the generalized infections systemic fungi can cause in animals
Eyes

- Keratitis – inflammation of cornea
- Conjunctivitis – inflammation of conjunctiva (eyelid lining)
- Keratoconjunctivitis – inflammation of cornea and conjunctiva
Keratoconjunctivitis

- Bacterial infection
  - Environmental bacteria
  - Cattle – infectious keratoconjunctivitis (pinkeye)

- Clinical symptoms
  - Cloudy cornea
  - Corneal ulcers
  - Red eyelids
  - Squinting eyelids
  - Runny eyes – overflowing tears
  - Mucopurulent – mucus, pus
  - Crusts
Ears

- Otitis externa – bacterial infection or mite infestation of external ear canal

- Otitis interna – bacterial infection of internal ear canal
Otitis Externa and Otitis Interna

Clinical symptoms
- Reddening of epithelium
- Pus drainage
- Odor
- Head tilting
- Itching
  - Scratching
  - Rubbing
  - Head shaking
Generalized Conditions

- **Causes**
  - Bacteremia
  - Septicemia
  - Toxemia

- **Abnormalities**
  - Anemia
  - Encephalitis
  - Hepatitis
  - Pneumonia
  - Nephritis
  - Gastroenteritis
Bacterial Generalized Conditions

*Clostridium* – clostridiosis
- Blackleg (*C. chauvoei*) – fast growth and exertion injury of leg muscles
- Blackgut (*C. perfringens* B) – diet change and overload of intestines
- Blackgut (*C. perfringens* C) – diet change and overload of intestines
- Blackgut (*C. perfringens* D) – diet change and overload of intestines
- Blackneck (*C. sordellii*) – traumatic injury of neck muscles
- Blackliver (*C. novyi*) – fluke larval migration of liver
- Redwater (*C. hemolyticum*) – fluke larval migration of liver
- Malignant edema (*C. septicum*) – anaerobic wound and needle contamination of muscles
- Tetanus (*C. tetani*) – anaerobic wound contamination of muscles and band castration
- Botulism (*C. botulinum*) – contaminated decayed food

*Leptospira* – leptospirosis
Fungal Generalized Conditions

- Systemic mycosis
  - Aspergillosis
  - Histoplasmosis
  - Candidosis
  - Blastomycosis
  - Coccidioidomycosis
  - Sporotrichosis