Veterinary Science
Preparatory Training for the Veterinary Assistant
Floron C. Faries, Jr., DVM, MS
Diseases Common to Humans and Animals

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

- Discuss zoonotic diseases that are transmitted by arthropods
- Discuss zoonotic diseases transmitted by close contact between humans and animals
- Discuss zoonotic diseases that are transmitted through animal food products
Infection

- Presence of infectious agents
  - Bacteria
  - Viruses
  - Fungi
  - Rickettsiae

- Presence of internal parasites
  - Worms
  - Protozoa

- No presence of clinical symptoms
Infestation

- Presence of external parasites
  - Mites
  - Fleas
  - Lice
  - Ticks
  - Flies

- No presence of clinical symptoms
Disease

- Presence of infectious agents or parasites
- Presence of clinical symptoms
Zoonosis (Zoonoses) (Zoonotic)

- Infections, infestations, and diseases shared by animals and humans
  - Animal to Animal
  - Animal to Human
  - Human to Human
  - Human to Animal
  - Human to Human
  - Animal to Animal
  - Animal to Human
Bacterial/Rickettsial Zoonoses

- Anthrax
- Brucellosis
- Intestinal Camplylobacteriosis
- Cat Scratch Disease
- Chlamydiosis
- Erysipelas
- Leptospirosis
- Listeriosis
- Lyme Disease
- Q Fever
- Plague
- Rocky Mountain Spotted Fever
- Salmonellosis
- Staphylococcal and Streptococcal Infections
- Tuberculosis
- Tularemia
Anthrax

- Blood and body fluids of animal carcass
  - Skin contact, ingest, inhale
Brucellosis

- Raw milk
  - Ingest
- Fetal fluid
  - Ingest, inhale
Q Fever

- Fetal fluid
  - Ingest, inhale
Tuberculosis

- Raw milk
  - Ingest
Leptospirosis

- Urine
  - Ingest
Intestinal Camplylobacteriosis, Listeriosis, Salmonellosis, Staphylococcosis, and Streptococcosis

- Manure contaminated food (water, milk, meat, vegetables)
- Ingest
Cat Scratch Disease

- Cat mouth and claws
  - Saliva – Cut skin contact
  - Saliva – Bite skin contact
  - Claws – Scratched skin contact
Erysipelas

- Swine saliva, feces, urine
  - Cut skin contact

- Swine carcass blood and body fluids
  - Cut skin contact
Chlamydiosis

- Parrot aerosolized feces
  - Inhale
Lyme Disease, Plague, Tularemia, and Rocky Mountain Spotted Fever

- Ticks and fleas
  - Bite
Viral Zoonoses

- Encephalitis
  - Mosquito
    - Bite

- Hantavirus
  - Feces, urine, saliva
    - Ingest, inhale, cut skin contact

- Herpesvirus
  - Monkey saliva
    - Bite, scratch, cut skin contact

- Rabies
  - Saliva
    - Bite, scratch, cut skin contact
Fungal Zoonoses

- Ringworm
  - Animals – direct skin contact

- Sporotrichosis
  - Animals – direct skin contact
  - Soil – skin contact

- Systemic Mycoses
  - Animals – direct skin contact, inhale
  - Soil – skin contact, inhale
Parasitic Zoonoses

- **Ancylostomiasis** – dog/cat hookworms
  - Feces – larvae – skin contact
  - Cutaneous larval migrans

- **Dipylidiasis** – dog/cat tapeworm
  - Fleas – ingest

- **Dirofilariasis** – dog heartworm
  - Mosquitoes – bite

- **Toxocariasis** – dog/cat roundworms
  - Feces – eggs – ingest
  - Visceral larval migrans

- **Toxoplasmosis** – cat coccidia
  - Cat feces – cysts – ingest
  - Food animal meat – cysts – ingest
Parasitic Zoonoses

- Hookworms
- Roundworms
- Flea tapeworm
- Heartworm
- Pinworm – No

- Coccidia
  - Toxoplasma
  - Cryptosporidium

- Sarcoptic mange mites
- Ticks
- Fleas
- Lice – No
Animal Facility
Infectious Disease Control

- Prevent and control spread of infectious agents and parasites
  - Animals
  - Animal owners
  - Staff
  - Volunteers
  - Visitors
  - Environment
Barrier precautions

Wear protective clothing (not worn off premises)
- Disposable gloves
- Clinic coveralls, coat, jacket, pants
- Mask, eyeware
- Rubber boots
- Foot bath
- Disposable shoe/boot covers
- Isolate contagious animal patients
  - Barrier precautions
  - Hand hygiene
    - Wash hands or use hand sanitizer
      - Handling animal patients
      - Cleaning cages, stalls
      - Handling animal waste, fluids, tissues, carcass
Utilize cleaning and disinfection
- Read and follow label
- Wear protective clothing
- Avoid skin contact
- Wash hands