Common Diseases in Animal Sheltering

Dog URI

- Upper respiratory infection (URI)
  - Also known as “kennel cough,” CONTAGIOUS
  - Caused by:
    - bacteria (Bordetella, Mycoplasma)
    - and/or viruses (parainfluenza CPI, adenovirus type-2 CAV-2)
  - Symptoms of common cold – coughing, gagging
    - normally goes away on its own
    - can develop into chronic cough or bronchopneumonia in young, ill, stressed dogs

Dog URI

- Other diseases causing signs of URI
  - Canine Distemper (also neurologic and GI) - CDV
  - Canine herpesvirus (also reproductive) - CHV
  - Mycoplasma (many other diseases)
  - Pneumonia (many causes)
    - Viral –canine influenza, canine distemper
    - Bacterial – many, including Bordetella and Mycoplasma
    - Fungal – Histoplasma, Blastomyces, others
    - Parasitic – migrating parasites (many), lungworms Capillaria and Aelurostrongylus

Dog URI

- Upper respiratory infection (URI)
  - Transmission:
    - Aerosol – CDV, CPI, Bordetella, CAV-2
    - Direct – CHV, Mycoplasma
    - Fomites – CHV, Bordetella
    - Fecal-oral - CDV
  - Incubation: 1-14 days, depending on agent
  - Agents can be shed for 1 week to many months, depending on the cause
  - Asymptomatic carriers
    - CHV, Bordetella, Mycoplasma

Dog URI

- Upper respiratory infection (URI)
  - Diagnosis:
    - PCR for viruses
  - Treatment:
    - Antivirals & lysine for herpesvirus
    - Tetracycline or azithromycin for bacteria
  - Vaccines available – intranasal works faster (2 days) than injectable (2 weeks)
    - Best protection when both are used in series
  - ZOONOSES: Bordetella

Dog URI

- Canine Distemper
  - Highly contagious and often fatal
  - Caused by virus – canine distemper virus (CDV)
  - Puppies highly susceptible
  - Transmitted by fecal-oral or aerosol
  - Incubation period 9-14 days
  - Begins as URI, followed by intestinal symptoms, then damages nervous system
  - High fever, eye and nose discharge, hard footpads, twitching, seizures (video)
Dog URI

- Canine Distemper
  - Can shed virus up to 3 months
  - Asymptomatic carriers are possible
  - Diagnosis – PCR, conjunctival swab, electron microscopy of urine, characteristic retinal lesions
    - Recent vaccination can cause false positive PCR
  - Therapy – supportive only
  - Highly effective recombinant vaccination available
  - Mortality >50% in adults and >80% in puppies
  - Survivors can have long term neurologic problems

- Recent vaccination can cause false positive PCR
- Therapy – supportive only
- Highly effective recombinant vaccination available
- Mortality >50% in adults and >80% in puppies
- Survivors can have long term neurologic problems

Dog URI

- Canine Distemper
  - Vaccination is highly effective
  - Merial Recombitek is more effective than any other distemper vaccine
  - It breaks through maternal immunity to protect puppies better

• Canine Influenza
  – Influenza type A virus
  – 2 clinical syndromes:
    - Mild form
      – cough for 10-30 days, looks like kennel cough
      – May have nasal discharge
      – Resolves without treatment

  – Severe form
    – High fever – 104-106F
    – Hemorrhagic pneumonia – coughing blood and difficulty breathing
    – Secondary bacterial pneumonia
    – Rapid onset – death the same day if severe
    – 5-8% mortality rate in high risk populations (kennels)
Dog URI

- Canine Influenza
  - 50-80% of infected dogs show disease – mostly mild
  - Virus is shed for 5-7 days
  - Runs its course in 14 days if isolated
  - Treatment
    - Mild form –
      - Antitussives (cough suppressants)
      - Antibiotics (doxycycline) only in high risk patients (shelters)
  - Severe form –
    - IV fluids
    - IV Antibiotics – doxycycline and penicillin
    - Tamiflu

- Prevention
  - Vaccine – limited usefulness
  - Does not prevent infection or shedding
  - Lessens severity of symptoms and duration of shedding
  - Killed vaccine requires at least 2 doses, 2 weeks apart to take effect
    - Immunity is best 1-2 weeks after the second dose
    - Little help to dogs in shelter less than 3 weeks
    - Vaccine is only conditionally licensed at this time
  - Susceptible to most disinfectants, including quats

- Diagnosis
  - Send 2 serum samples taken 2 weeks apart to Cornell University Vet School
  - Take nasal swabs within 5 days of exposure
  - PCR is available but unreliable
    - Canine flu (H3N8) is not zoonotic

Respiratory Pathogen Chart

DDx URI

- Differentiating between the different causes of respiratory infection at shelters is not always all that important
  - Viruses are treated supportively
  - Bacteria are treated with antibiotics
  - Recognize Distemper early and euthanize
  - PREVENTION AND OUTBREAK MANAGEMENT ARE MORE IMPORTANT THAN SPECIFIC DIAGNOSIS
  - Prevention = vaccination and disinfection

- Problems that cause cough other than URI
  - Chronic Bronchitis – small fat dogs
  - Congestive Heart Failure
  - Pneumonia
  - Collapsing Airways
  - Heartworm Disease
DDx URI

- Vaccination
  - IN Bordetella/CPI vaccine on admission for all dogs
  - IN vaccine booster in 2-4 weeks
  - If you have the funds, use SC Bordetella simultaneously
  - IN takes effect within 2 days, SC takes 2 weeks
- Quarantine new admissions for 2 weeks
- Isolate coughing dogs immediately and review disinfection protocols

Respiratory Pathogen Chart

Dog Diarrhea

- Parvovirus
  - Attacks rapidly dividing cells in the body
  - Intestinal lining – bloody diarrhea and vomiting
  - Heart - very young puppies, when heart is forming
  - Bone marrow – low white counts and severe infection (this is usually what causes death)
  - Affects puppies more frequently and severely.
  - Unvaccinated puppies are at greatest risk
  - Rarely affects adult dogs, regardless of vaccination status

Dog Diarrhea

- Coronavirus
  - Contagious intestinal virus
  - Similar to parvo but less severe
  - Usually affects puppies, and is usually self-limiting in healthy dogs
  - Can be more severe in stressed or malnourished dogs
  - Transmission: fecal-oral

How to tell if an animal has worms

- Signs – vomiting, yellow to orange diarrhea (may have blood)
- Vaccine is not recommended by AAHA for any dog
- More of a problem in a shelter setting than in the “real world”

Why treat worms?

- Susceptibility to other diseases
- Anemia, even death (hookworms)
- Prevents irretrievable contamination of shelter ground with worm eggs
Dog Diarrhea

- Diagnosis
  - Fecal flotation

  Tapeworm egg basket

  Hookworm egg

  Roundworm egg
Dog Diarrhea

• Treatment: Types of dewormers
  – Pyrantel (strongid T, Nemex) – hookworms, roundworms, stomach worms
  – Resistance to hookworms has been observed
  – Fenbendazole (Panacur) – hooks, rounds, Whipworms, Giardia
  – Praziquantel (Droncit) – tapeworms
  – Ivermectin (200 ug/kg) – hookworms, rounds, stomach worms
  – Drontal = pyrantel + praziquantel
• Deworm on intake
• Wormers must be repeated in 2–3 weeks, as new eggs hatch out
• Worm eggs may be hard to kill in the soil
  – Can do “fecals” on dirt to check for contamination

Dog Diarrhea

• Coccidia - Protozoan causes diarrhea and sometimes vomiting
  • Transmission – fecal-oral
  • Asymptomatic carriers possible
  • Diagnosis: fecal direct or flotation
  • Treatment: Albon for at least 2 weeks, sometimes longer
    – Ponazuril (Marquis) if resistant to Albon

Dog Diarrhea

• Giardia - Protozoan affects mostly dogs, but also cats
  • Causes diarrhea and sometimes vomiting
  • Transmission – fecal-oral, including contaminated water
  • Asymptomatic carriers possible
  • Diagnosis: fecal wet mount or flotation, ELISA
  • Treatment: metronidazole, fenbendazole
  • ZOONOSIS – Beaver Fever
  • Vaccine will be off the market in coming months

Dog Diarrhea

• Bacterial Diarrhea
  – There are numerous bacteria that can cause diarrhea in shelter dogs and cats
  – Most can also cause diarrhea in people
  – Treated with antibiotics
  – Some can cause severe illness, chronic illness or significant weight loss
  – Some include E Coli, Salmonella, Campylobacter, Shigella, etc.
  – Culture for specific identification is rarely needed
Dog Diarrhea

• “Stress” Diarrhea
  – For many reasons, dogs under stress are prone to GI upset
  – These are usually apparently healthy, except for the behavioral stress and diarrhea
  – My favorite way of dealing with this is:
    • Fecal flotation to rule out parasites
    • Deworm as needed and metronidazole 62.5mg (1/4 of a 250 tablet) twice daily for 7 days.
    • Probiotics are also nice (Fortiflora, Culturelle, etc.)

Dog Hepatitis

• Infectious Canine Hepatitis
  – Contagious viral disease
  – Caused by an adenovirus (CAV-2)
  – Transmitted by exposure to the urine of an infected dog
  – Causes inflammation of the liver
    • Acute liver failure
    • Chronic liver disease
  – Effective vaccine available
  – Typo on page 7 (CAV2 is not distemper)

Dog Skin Disease

- Scabies
- Demodectic Mange, Red Mange
- Bacterial Infection, malnutrition
- Flea Infestation
- Ringworm
- Severe allergies, yeast infection
- Hormonal imbalance – low thyroid, high adrenal, diabetes
- Chinese Crested Mix

Dog Skin Disease

Sarcoptic Mange – Scabies
- Caused by mite *Sarcoptes scabiei* that burrows in the skin
- Highly contagious to other dogs (any age)
- Causes hair loss and intense itching
- Transmission: direct, fomites
- Incubation often 1-2 weeks or longer
- Shed organisms until treated
- No asymptomatic carriers
Dog Skin Disease

**Diagnosis:**
- Can be very difficult to find ("Sarcoptes Incognito")
- Sometimes see mites on deep skin scraping (use mineral oil)
- Pinnal-pedal reflex – back leg scratches when you fold the ear flap on the same side (85% diagnostic)

**Treatment:** Mites are generally easy to kill; treat every 2 weeks until healed (2-3x)
- Ivermectin, Revolution (selamectin)
- LymDyp, Paramite Dip

**Zoonosis:** Can temporarily infect humans and cats (up to 3 weeks)

---

**Demodectic Mange**

*Demodex* mites live on normal dogs and cats
- Overgrow and cause problems in young, ill and immunocompromised pets
- Disease much more common in dogs than cats
- Red skin and hair loss, not usually itchy
- (localized) or over entire body (generalized)
- 80% of puppies with localized outgrow condition
- Other 20% can be very difficult to treat
- Transmission: from mother to pup when nursing
- *Demodex* is rather contagious in cats, but not

**Diagnosis – skin scraping (mineral oil)**
- A few adult mites may not indicate disease
- Lots of mites with hair loss indicate disease
- Sometimes skin biopsy required for cats
- Cats should be checked for FeLV/FIV, and other illness
- Adult dogs should be checked for illness

**Treatment (until 2 scrapings 2 weeks apart are negative, and skin is healed)**
- Also treat secondary skin infection

---

**Bacterial Skin Infection (Pyoderma)**

- Pustules, red bumps (papules) and crusting
- Malnutrition predisposes to this
- As do poor housing conditions
  - Fleas, ticks, scabies, *Demodex*
  - Wet bedding
  - Frost bite
  - Bite wounds
- Allergies and hormonal problems also
- Diagnosis – bacteria on impression smears, response to antibiotic treatment

**Treatment for DOGS:**
- Mitaban (Amitraz, Taktic) dips
- High dose ivermectin (NOT COLLIES)
- Daily Interceptor (milbemycin)
- Promeris once monthly for 2-4 months

**Treatment CATS:**
- LymDyp works best
- Amitraz dips are not safe for cats, but amitraz in oil can be used on spots, with caution
Dog Skin Disease

**Fleas (Flea Product Handout)**

- MUST TREAT ALL DOGS AND CATS AS THEY COME IN
  - Capstar (nitenpyram) – cheap, pill lasts a few days
  - Advantage (imidocloprid), Frontline (fipronil)
  - Promeris (metaflumizone), Revolution (selamectin)
  - Comfortis (spinosad) – monthly pill
  - Pyrethrin sprays, dips (safe for pups and kittens)
- And control fleas in the environment
  - Fipronil (Over and Out) and spinosad very safe and last long periods of time
  - Can also use Dursban and other harsh chemicals

- And control fleas in the environment
  - Fipronil (Over and Out) and spinosad very safe and last long periods of time
  - Can also use Dursban and other harsh chemicals

**Working Up Skin Disease**

- “5 Slide Technique”
  - Blade, glass slides, mineral oil, scotch tape, DiffQuick Stains, microscope
  1. Skin Scrapings in mineral oil - mites
  2. Impression Smears - stained
  3. Ear Swabs – left and right
  4. Mineral oil for ear mites
  5. Stained (no oil) for bacteria/yeast
- If the answer is not here, the dog needs to see a vet

Dog Skin Disease

**Dorsal Skin Necrosis**

- Open wounds or scars over the back are not uncommonly seen
- Many assume the dog was burned, or something caustic was put on their back
- There are numerous causes of this syndrome
  - Heat stroke (black dogs who live outdoors)
  - Heating pad burn
  - Sometimes there is no identifiable cause in dogs who are well cared for
### Dog Skin Disease

- **Same bacteria that cause skin infections in dogs and cats**
  - *Staphylococcus spp.*
  - *Streptococcus spp.*
- Infect the lymph nodes of horses, causing abscesses and enlarged lymph nodes
- If large enough, can affect swallowing and ability to breathe
- More of a problem in the young and with overcrowding
- Can vaccinate horses to prevent

### Strangles

- **Upper respiratory infection (URI)**
  - Highly contagious, rarely causes death, normally goes away on its own
  - can develop into bronchopneumonia in young, ill, stressed cats
  - Chronic infections possible (FHV and calicivirus)
- Caused by:
  - Calicivirus – eyes, nose, oral ulcers, gingivitis
  - Herpesvirus – eyes, nose (chronic)
  - Bacteria - Bordetella, Chlamydia, Mycoplasma – eyes are worst

### Cat URI

- **Upper respiratory infection (URI)**
  - Transmission:
    - Aerosol – FCV, FHV (rhinotracheitis), Bordetella
      - 4 feet in all directions
    - Fomites – FCV, Bordetella
    - Direct – Chlamydia, Mycoplasma
    - Live for only a few hours off the feline body
  - Incubation – 1-14 days (viruses shorter)
  - Asymptomatic carriers possible for all (Chlamydia is rare)
  - Definitive Diagnosis rarely necessary
Cat URI

- Upper respiratory infection (URI)
  - Symptoms:
    - eyes – red, discharge
    - FHV can cause corneal ulcers
    - Coughing and sneezing
    - Fever
    - Anorexia, lethargy, dehydration
    - Oral ulcers – especially FHV and calicivirus
    - Joint pain and bruising – “killer” calicivirus

  - Treatment: supportive
    - Antivirals – FHV (not FCV)
    - Bacteria – tetracycline (PO and eye ointment)
    - CAREFUL of triple antibiotic eye ointment. Rare but fatal anaphylactic reactions have been reported
    - Use Terramycin or erythromycin eye ointment
    - Vaccines available, partially effective
    - ZOONOSIS – Bordetella, Chlamydia

Cat URI

- Killer Calicivirus (Virulent Calicivirus, Hemorrhagic calicivirus)
  - mutation from the original calicivirus, which causes more severe disease
  - about 35-50% fatal
  - Adults seem to be more severely affected than kittens - opposite of most other diseases
  - High fever >104°F
  - Each outbreak from mutation seems to run its course in 2-3 months

  - Typical calicivirus symptoms plus
    - Sore joints
    - Swollen feet
    - Skin ulcers and sores

  - Fort Dodge CaliciVax licensed for killer calici
    - However, new killer strains are not closely related to strains used to make the vaccine
    - No evidence that this vaccine is better than others
    - MLV FVRCP is the single most important vaccine shelter cats receive

Panleukopenia

- Panleukopenia (feline parvovirus)
  - Also known as feline distemper
  - Viral disease that may be fatal
  - Affects kittens and rarely unvaccinated cats, also raccoons
  - Causes abortions and fetal brain defects in pregnant cats
  - Not the same as canine distemper, and not contagious to dogs
  - Similar to Parvo in dogs—diarrhea with blood, vomiting bile, lethargy, fever then subnormal

  - Transmission
    - fecal-oral
    - Also shed in urine, saliva, vomit and blood (fleas)
  - Incubation 4-14 days (usually less than 10)
  - Shed virus for 10-12 days
    - Canine parvo test positive
    - No asymptomatic carriers
  - Treatment: same as for canine parvovirus
  - Deadly to kittens, often within 12-72 hours
    - 75% mortality < 4 months, 50% > 4 months
  - Very effective vaccine available
Feline Leukemia & FIV

- Feline leukemia (FeLV)
  - Contagious fatal viral diseases, no cure
  - Attacks and destroys the immune system
    - Chronic infections and poor healing are common
    - Kittens that become infected may die, become immune, or not show symptoms for years
    - Adults less often infected
    - Once infected, survival is usually less than 2 years
  - Transmission: direct contact with saliva, urine, blood

- Incubation can be as long as years
- Asymptomatic carriers are common
- Diagnosis: ELISA (SNAP)
  - Should be considered for any cat who is not healthy
  - Blood testing all cats on admission highly recommended
  - If positive, means virus is in the body; retest in 60-90 days
  - If still positive, cat is infected for life
  - There are false negatives

- Treatment: supportive
  - Isolate from FeLV negative cats
  - FeLV + cats should be adopted out only in very special circumstances
  - Very effective vaccine is available
    - Every kitten should receive FeLV series
    - Boosted at 1 year
    - Further boosters only if an outdoor cat

Feline Leukemia & FIV

- Feline immunodeficiency virus (FIV)
  - Also known as feline AIDS
  - Some cats can live healthy lives for many years without progressing to AIDS – not necessarily a death sentence, though it can be
  - Attacks and destroys the immune system if AIDS
  - Kittens that become infected may die, become immune, or not show symptoms for years
  - Transmission: bite and sexual transmission

- Lifelong asymptomatic carriers
- Diagnosis: blood tests
  - ELISA + means exposure to virus at some time
  - Western Blot can rule out false + on ELISA
  - Vaccines makes cats test positive
  - No test (including PCR) that reliably distinguishes between vaccination and infection
  - Kittens can test positive and clear infection
  - Retest in 120 days

- Therapy: supportive
- Controversial vaccines provides questionable immunity and causes positive test
  - Always ask on surrender if ever got FIV vaccine
  - Green tag not widely used, but indicates vaccination
  - Tattoo or microchip is a great idea
FIP

- FIP (Feline Infectious Peritonitis)
  - Fatal, contagious viral disease
  - Effusive (wet) form – fever, swollen abdomen
  - Noneffusive (dry) form – fever, weight loss, neurologic, with no fluid build up
  - Transmission: unknown
    - Happens when nonpathogenic GI coronavirus mutates
    - May be directly infectious
  - Incubation: 2 weeks-2 months, no cure

FIP

- Diagnosis: multifactorial
  - Blood test for FIP can give false negatives, and cannot distinguish between FIP virus and similar ones that do not cause FIP
  - Other blood tests can be supportive
  - Abdominal fluid - yellow, sticky, high protein, low cells
  - The only real test is biopsy or necropsy
  - Therapy: supportive, Trental, prednisone
  - Questionable vaccine may cause enhanced infection in some cases

Notoedric Mange - Scabies

- Caused by mite *Notoedres cati* that burrows in the skin
- Highly contagious to other cats (any age)
- Causes hair loss and intense itching, mostly on the head
- Transmission: direct, fomites
- Incubation often 1-2 weeks or longer
- Shed organisms until treated
- No asymptomatic carriers

Notoedric Mange - Scabies

- Diagnosis:
  - Usually see mites on deep skin scraping (use mineral oil)
- Treatment: Mites are generally easy to kill; treat every 2 weeks until healed (2-3x)
  - Ivermectin, Revolution (selamectin)
  - LymDyp
- NOT ZOONOTIC
Litter Box Problems

- FLUTD (Feline Lower Urinary Tract Disease)
  - Feline urologic syndrome (FUS) – old term
  - Should be suspected on all cats not using litterbox
  - Accounts for 10% of feline hospital admissions, and very common reason for surrender
  - 22-55% mortality rate (often euthanasia) without lifelong treatment
  - Symptoms – blood in urine, straining to urinate, urinating outside the litter box, urinary blockage

- Causal agents unknown, probably not contagious
- Diagnosis – rule out urinary tract infection, tumor, stones, Urinary tumor, Physical defect
- Treatment: increase water intake, stress reduction, environmental enrichment, etc.
- Other names: FIC – feline interstitial cystitis, sterile cystitis, idiopathic cystitis

Heartworms

- Affects mostly dogs, but also cats
  - More dangerous for cats, as a few heartworms cause more problems in small heart
- Worms live in the blood and tissues, and then migrate to the heart and organs over a period of months, grow to 14” long
- Transmission: mosquitoes, more prevalent in moist areas
  - Dogs with heartworms are sources of infection to mosquitoes and thus other dogs nearby
- Incubation: 6 months to many years

- Heartworms can be fatal, whether or not treated, in dogs and cats
- Treatment is expensive and risky for dogs, especially in advanced cases
  - Immiticide
  - Putting on Heartguard my clear worms over several years if dog does well that long
  - Cats can not be treated – only managed
- Every Adoptive Owner should be counseled on Heartworm prevention appropriate for their area
  - Giving any HWPrev except ivermectin to dog with heartworms can be very dangerous

Ticks

- Remove from dogs and cats as they come in
  - Wear gloves to avoid exposure to pathogens in blood if they burst
  - Frontline spray and topical can help
  - Permethrin can be used on dogs BUT NOT CATS!!
- Watch for ticks in the shelter
  - Brown Dog Ticks (Rhipicephalus sanguineus) they can live and breed in buildings
  - They can be very difficult to get rid of

Ear Mites

- Mostly in cats, but can affect dogs
- causes inflammation of ear canals, itchiness, sores behind ears, dark deposits inside ears
- Contagious, mites can hide out on rest of pet
  - Bathe or treat with systemic (ivermectin/selamectin)
- Diagnosis – ear swab with mineral oil
- Eggs hatch and grow to adults in 3 weeks
  - Treat the ears, coat, and animal’s environment for at least 3-4 weeks
  - Flea control products that kill adult fleas will kill mites in the coat
  - Many ear treatments – mineral oil, tresaderm, MitaClear, ivermectin
Ear Mites

Vaccinations

**Vaccine Types**
- Killed – bacteria or viruses are dead, and can not cause disease
- Bacterin – Bacteria are killed or modified (attenuated) so that they infect and cause immunity but do not cause disease
- modified-live virus – Virus is modified so that it infects and causes immunity but does not cause disease
- Recombinant - only parts of the infectious disease (antigens) are used in the vaccines, so they can not cause disease.
- Toxoid – vaccine created toxins cause an immune response but not disease

Vaccinations

**Vaccine Types**
- Killed – rabies, FIV, canine flu, FeLV
  - Weaker immunity than MLV
  - At least 2 doses 2-4 weeks apart
  - Safer for puppies, kittens and the sick
- Bacterin – Lepto, Lyme
  - Weaker and shorter lived immunity than MLV
  - At least 2 doses 2-4 weeks apart
  - Booster every year
  - Increased risk of vaccine reaction

Vaccinations

**Vaccine Types**
- modified-live virus – FVRCP, DHPP
  - Stronger immunity – good protection with one dose
  - More likely to cause adverse reaction or even disease
  - Cat URI vaccines only about 50% effective
- Recombinant - PureVax FeLV, Rabies; Recombitek CDV
  - Best of both worlds – strong immunity with low risk of adverse reaction

Vaccinations

**Vaccine Types**
- Toxoid – tetanus, rattlesnake
  - Short lived immunity
  - More likely to cause adverse reaction

Vaccine Handout

**Maternal Immunity (MAb)**
- Puppies and kittens get immunity as they nurse during the first few days of life
- As it wears off by 8-16 weeks of age, there is a “window of susceptibility” where they can’t respond to vaccine yet, but are also not protected from disease
- Vaccines that break through MAb the best:
  - IN for respiratory pathogens
  - MLV better than killed
  - recombinant, high titer/low passage CPV better than MLV
**Vaccinations**

**IN vs. Injectable for URI Pathogens**
- IN work within 2 days
- Injectable takes 2 weeks to take effect
- If IN given SC by mistake, the animal can become very ill
- If SC given IN by mistake, terrible nasal ulcers can occur
- IN can mediate symptoms in an outbreak
- SC CPI is not effective – it is a surface disease
- **IN PANLEUKOPENIA IS NOT EFFECTIVE!!!**

**Vaccinations**

**Mandatory Vaccines for Shelters**
- **Dogs**
  - Bordetella (IN + SC) – Bordetella, Parainfluenza
  - DHPP – Distemper, Hepatitis, Parainfluenza, Parvovirus
  - Rabies
- **Cats**
  - FVRCP – Rhinotracheitis, Calicivirus, Panleukopenia
  - Rabies

**Vaccination Schedule**

**Puppies and Kittens**
- **DHPP or FVRCP**
  - First vaccine as young as 6 weeks of age
    - MLV FVRCP given to young kittens or pregnant queens can cause brain problems in the kittens
  - Booster every 2-4 weeks until 16 weeks of age
- **Rabies**
  - One dose between 12 and 16 weeks of age
- **Bordetella for puppies**
  - First vaccine as young as 6 weeks of age
  - Booster in 2-4 weeks
- **All vaccine boosted at 1 year of age**

**Vaccination Schedule**

**Adult Dogs and Cats**
- **DHPP or FVRCP**
  - First vaccine on intake, unless records show current
  - If no records or no history of vaccines, booster in 2-4 weeks
- **Rabies**
  - One dose on intake if records show not current
- **Bordetella for puppies**
  - First IN vaccine on intake
  - Booster in 2-4 weeks

**Proven Duration of Immunity**

**Dogs**
- Rabies: 3 years +
- Parainfluenza: 3 years
- Distemper: 5-7 years
- Adenovirus: 7 years
- Parvovirus: 7 years
- Leptospirosis: 1 year
- Bordetella: 1 year

**Cats**
- Rabies: 3 years
- Panleukopenia: 6 years
- Herpes: 5-6 years
- Calicivirus: 3 years
- FeLV: 1 year, not tested longer

**Herd Health and Agriculture**
- Brucellosis Testing
- Foot and Mouth Quarantine
- Avian Flu
- Newcastle’s Disease and Quarantine
- Potomac Horse Fever and crossing state lines
- Coggins and TB Testing

www.wendyblount.com
Other Web Resources

• Animal Sheltering Articles (HSUS)
  – How to Vaccinate a Cat
  – Vaccination Station
  – Virulent Calicivirus
  – Feline Upper Respiratory Infections (2)
  – Battling Parvovirus (3)
  – Testing for FeLV and FIV

www.wendyblount.com

Other Web Resources

• Compendia
  – HSUS Disaster Planning for Animal Shelters
  – AAFP Vaccine Guidelines 2006
  – AAFP Vaccination Table Summary 2006
  – AAFP Position on FIV Vaccine 2002
  – AAFP Guidelines on FeLV and FIV 2009
  – AAHA Vaccination Guidelines 2007
  – AVMA COBTA Report 2002

www.wendyblount.com

Other Web Resources

• AVMA Brochures
  – Vaccination – English and Spanish
  – Canine Distemper – English and Spanish
  – Canine Parvovirus – English and Spanish
  – Panleukpenia – English and Spanish
  – External Parasites – English and Spanish
  – Heartworms – English and Spanish
  – Internal Parasites – English and Spanish

www.wendyblount.com

Other Web Resources

• Idexx Shelter Discount Enrollment Form
• Koret Fact Sheet – Canine Distemper Virus
• Koret Fact Sheet – Canine Parvovirus

www.wendyblount.com