Infectious Disease Protocol: Coccidia

Basic Disease Information:
- Isospora are species-specific and not zoonotic. Dogs cannot be infected with feline isospora and vice versa.
- They are small protozoans (single-celled organisms) that affect the intestinal tracts of dogs and cats, mainly puppies and kittens.
- Transmitted through fecal-oral route, very effectively spread by fomites.
- Incubation period: 3-11 days.
- Shedding period: 1-9 weeks.
- Carrier State: Yes.
- Resistant to many disinfectants; high heat cleaning (steaming) is effective.
- It only takes feces 8-36 hours to become infectious, therefore, frequent litter box changes are essential.
- Risk factors include: young age, stress (including transportation, change in ownership, weaning), parasitic co-infection, nursing mothers, and/or immunocompromised/sick animals.
- We prophylactically treat all incoming animals on intake with a dose of Marquis Paste and repeat this dose 3 weeks later.

General Policy:
Treatment of Coccidia infected animals should only be undertaken in a shelter if sufficient facilities exist to effectively separate the patient such that the rest of the population is not put at risk, and staffing resources (time, skill level) are adequate to ensure humane and appropriate care. The treatment plan will be determined by the VCPR (Veterinarian Client Patient Relationship) between the facility and their regular veterinarian.

If you see or suspect the following signs:
- Diarrhea +/- mucous or blood
- Weight loss
- Dehydration
- Depression
- Lethargy

Follow these next steps:
Begin and Maintain Documentation

Don Personal Protective Equipment

Isolate Case

Appropriate Signage

Report suspicion immediately to Branch Manager in person/by phone; Branch Manager to report to Regional and Shelter Health & Wellness by email, if necessary, according to the “Disease Reporting Protocol”

- Euthanize
  - Appropriate Cleaning Protocols
    - Appropriate Animal Disposal & Removal
- Veterinarian Consultation
  - Treatment
    - Appropriate Cleaning
      - Healthy Animal
      - Re-Enter General Animal Population
**Diagnosis:**

**When to test:** Any animal exhibiting signs of diarrhea longer than 24hrs, that is also exhibiting any of the other clinical signs of Coccidiosis (inappetance, weight loss, dehydration, depression, lethargy)

**Who performs the test:** External diagnostic facility (Antech or Idexx)

**How to test:** Fecal flotation

**Where Housed:**
- **Isolate** all positive cases ideally in a separate room used only for this purpose (ie. not in a bathroom). If strict isolation is unavailable, appropriate separation from the remainder of the population is mandatory.
- **Quarantine** of exposed animals is not necessary, however, close observation of these animals for signs of diarrhea is imperative. This observation period should not prevent any animal from continuing through the shelter process.

**How Cleaned:**
1. **Don proper PPE** for ANYONE coming in contact with a suspected animal or entering isolation – Gloves, gown, impermeable shoe covers.
2. Continue with your Branch’s cleaning protocol as approved by the Department of Shelter Health & Wellness. **For cats,** spot cleaning is always preferred unless the cage is heavily soiled. Litter boxes must be checked and changed out frequently throughout the day (every couple hours). Any stool in kennels, must be picked up promptly and disposed of appropriately, instead of hosing it down, a method that risks spreading infectious material all over the walls of the kennel. All blankets, toys, bedding etc must be discarded.
3. Staff must wear full PPE (Gloves, gown, impermeable shoe covers) in any room housing symptomatic animals undergoing treatment.
4. High heat cleaning/scalding water or 10% ammonia solution is reportedly effective in removing cysts from the environment.
5. **Disinfect using** (whichever is your normal disinfecting agent):
   - **Oxidizing Agents:** Such as Accel, Peroxigard Plus, Virkon
6. Use mechanical scrubbing to help loosen the eggs from the surface, enabling the surface to be cleaned and disinfected properly.
7. **ONE FULL CLEANING** (cleaned, disinfected, dried) is required before reusing the kennel.
8. Steam drying is required before reusing any soft furnishings ie. Carpet covered cat towers

**NOTE:** A thorough mechanical cleaning, scrubbing, rinsing, steaming (soft furnishings only) and drying is essential to remove Coccidia from the environment as it is resistant to almost all cleaning and disinfecting agents.

** As a reminder where staff is responsible for cleaning multiple housing units, the sequence they should be cleaned is: From clean to dirty,
1. Adoptable kittens/puppies
2. Adoptable adult animals
3. Stray/Quarantine kittens/puppies
4. Stray/Quarantine adult animals
5. Isolation areas

Which animals to treat:
- Treat only symptomatic animals. This should only be undertaken in a shelter if sufficient facilities exist to effectively separate the patient such that the rest of the population is not put at risk, and staffing resources (time, skill level) are adequate to ensure humane and appropriate care. The treatment plan will be determined by the VCPR (Veterinarian Client Patient Relationship) between the facility and their regular veterinarian.
- All animals should be treated, as long as they are a good adoption candidate and as long as there is appropriate separation (separate room isolated from other animals is preferred but not mandatory) and adequate resources to support treatment and housing.

Treatment:
- Prophylactically treat all animals on intake with Marquis Paste dose and repeat 2 weeks later.
- Any animal showing symptoms and/or a positive diagnostic test, will receive additional doses as needed, based on clinical signs/fecal exams and in consultation with a Veterinarian or Shelter Health and Wellness.
- At the end of treatment - Bathing (with an antibacterial shampoo such as Pure Oxygen Ultimate Shampoo) the animal or wiping down with an anti-bacterial wipe is absolutely essential as it will reduce the number of infective cysts found on the animals fur and prevent re-infection.

**NOTE:** Rechecking a fecal sample in 2 weeks is recommended as some animals may remain positive but are asymptomatic. These animals should continue through the shelter process.

Monitoring:
- ACA or senior animal care member is responsible for daily monitoring and proper documentation.

Recovery/Treatment Failure:
- To be determined by the supervising veterinarian.

Adoption:
- Animals will be placed up for adoption after treatment has concluded and symptoms have resolved.
- REMINDER: Before being placed for adoption, bathing (with an antibacterial shampoo such as Pure Oxygen Ultimate Shampoo) the animal or wiping down with an anti-bacterial wipe is absolutely essential as it will reduce the infective cyst load found on the animal's fur and prevent re-infection.

Documentation:
• All branches are required to provide pertinent information as per the Ontario SPCA Adoption Sharing and Caring Policy

References: Koret Centre, Shelter Medicine – UC Davis
(http://www.sheltermedicine.com/library/intestinal-parasite-control-guidelines)