

## Infectious Disease Protocol: Giardia

### Basic Disease Information:

- **ZOONOTIC** (Humans most likely to be infected from contaminated water sources)
- It is a microscopic protozoan parasite that affects the intestinal tract and liver
- Transmitted through direct or indirect (ie. Fecal contaminated water/food) fecal-oral route
- **Incubation Period:** Average 8 (dogs) – 10 (cats) days, with a range of 5 -16 days
- **Shedding Period:** Can occur even after treated. Chronic shedding with sporadic peaks is common.
- Cysts can exist for months in a moist/cool environment so **drying** is the most important step
- Mechanical scrubbing with a detergent is key to reducing cyst numbers
- **Carrier state:** YES. Most infections in healthy, adult animals are asymptomatic

**\*\*NOTE:** Total eradication is unrealistic. Focus should be on reducing the cyst load and control of spread rather than elimination.

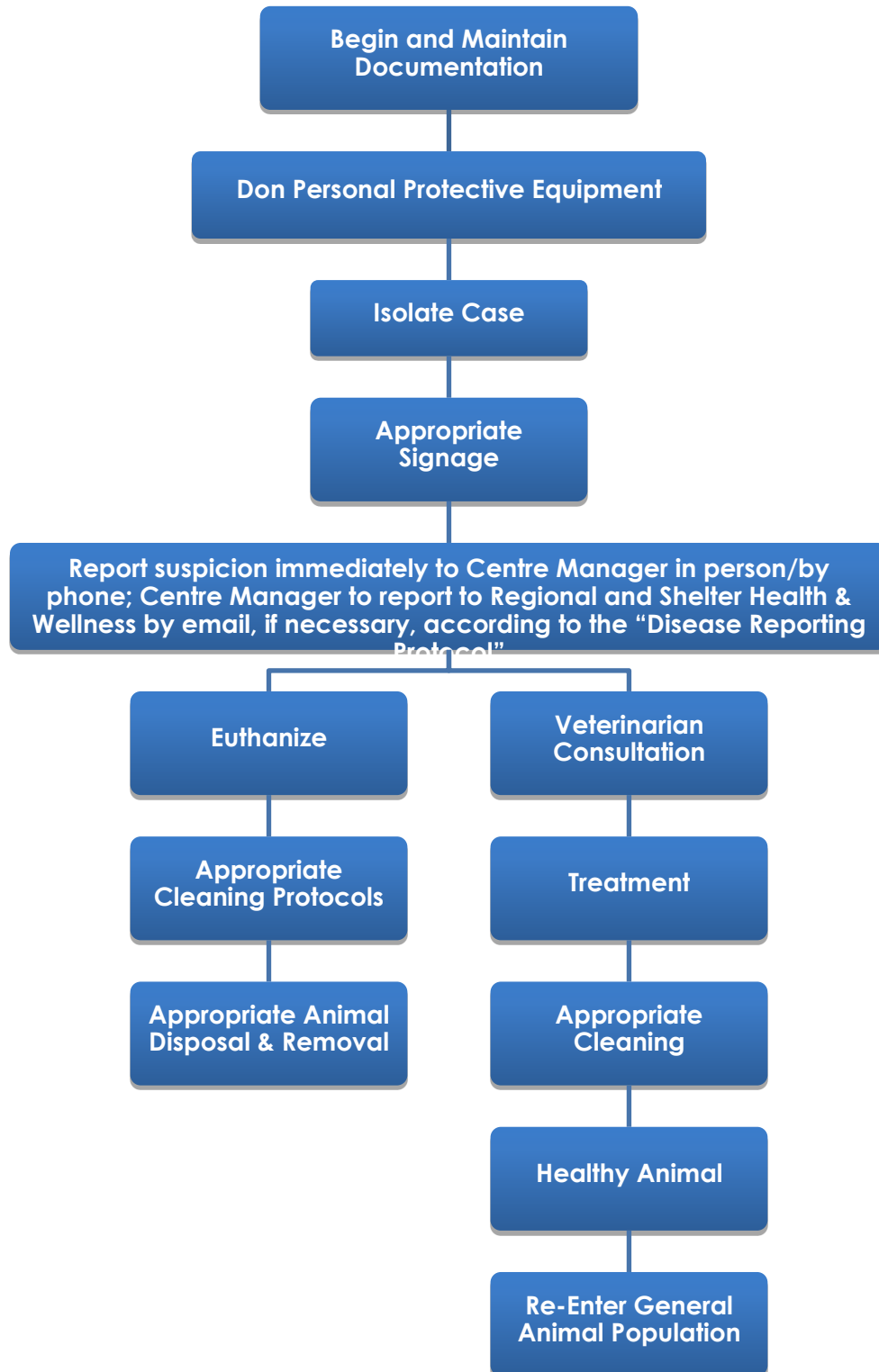
### General Policy:

Treatment of Giardia infected animals should only be undertaken in an animal centre 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
- Chronic weight loss
- Pale, malodorous feces

### Follow these next steps:



**Diagnosis:**

**When to test:** Any animal exhibiting signs of diarrhea longer than 24hrs. in an otherwise healthy looking animal

**Who performs the test:** External diagnostic facility

**How to test:** Fecal wet mount and ELISA test at external diagnostic facility (ie. Antech or Idexx)

**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
- **Work with a Veterinarian knowledgeable in shelter medicine to develop a plan for other animals in the facility**

**How Cleaned:**

1. **Don proper PPE** for ANYONE coming in contact with a suspected animal or entering isolation – disposable gloves, disposable gown, impermeable shoe covers
2. Continue with your Animal Centre'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)
3. Staff must wear full PPE (gloves, gown, shoe covers) in any room housing symptomatic animals undergoing treatment
4. **Disinfect using** (whichever is your normal disinfecting agent):  
**Oxidizing Agents:** Such as Prevail®, Peroxigard Plus™, Virkon®
5. Dishwashers should be used in place of mechanical scrubbing, when at all possible
6. **ONE FULL CLEANING (cleaned, disinfected, dried) is required before reusing the kennel**

**\*\*NOTE:** A thorough mechanical cleaning, scrubbing, rinsing and drying is essential to decrease the cyst load as Giardia 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 an animal centre 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:**

- Any animal showing symptoms and/or a positive diagnostic test, will receive a 10 day course of Panacur® in combination with 5 day course of Metronidazole (under Veterinary care)
- At the end of treatment - **Bathing** (with an antibacterial shampoo such as Pure Oxygen Ultra Shampoo®) the animal or **wiping down with an anti-bacterial wipe (such as Prevail RTU®) is absolutely essential** as it will reduce the cyst load found on the animal's fur

**\*\*NOTE:** Re-testing post treatment is not recommended as some animals may remain positive but are asymptomatic. These animals should continue through the shelter process.

In the human medical field, there is an acceptance that Giardia is just there, and the risk of over-treating and causing the development of resistance to drugs is a worse outcome. The veterinary medical community has been over-treating giardia. If infection does not necessarily equate with disease, and most are not zoonotic, then it's very expensive and unnecessary.

**Monitoring:**

- ACA, RVT 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 Ultra Shampoo®) the animal or **wiping down with an anti-bacterial wipe (such as Prevail RTU®) is absolutely essential** as it will reduce the cyst load found on the animal's fur

**Documentation:**

- All animal centres are required to provide pertinent information as per the Ontario SPCA Adoption Sharing and Caring Policy

**References:** Koret Centre, Shelter Medicine – UC Davis