

Antech™ *Cryptosporidium* spp. Algorithm

Pet signalment, history (clinical, treatment), test results, risk, and pet-owner specific factors will inform individual case treatment decisions.

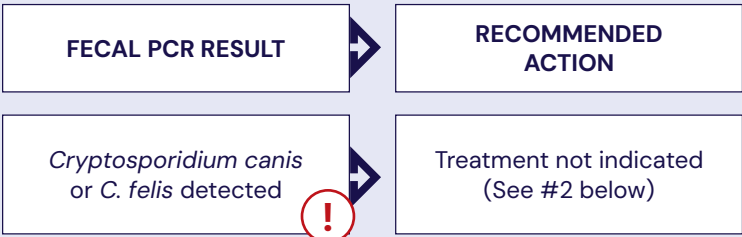
Consideration should be given to appropriate antimicrobial use/stewardship and One Health.

Antech Customer Support Services, [800-872-1001, opt 2](tel:800-872-1001), us and [800-341-3440, opt 2](tel:800-341-3440), ca are available for case support and conversation.

Pet with No Clinical Signs

KeyScreen™ GI Parasite PCR *Cryptosporidium* spp. Algorithm

Pet evaluated for wellness/preventive fecal screening & *Cryptosporidium* spp. detected with NO clinical signs

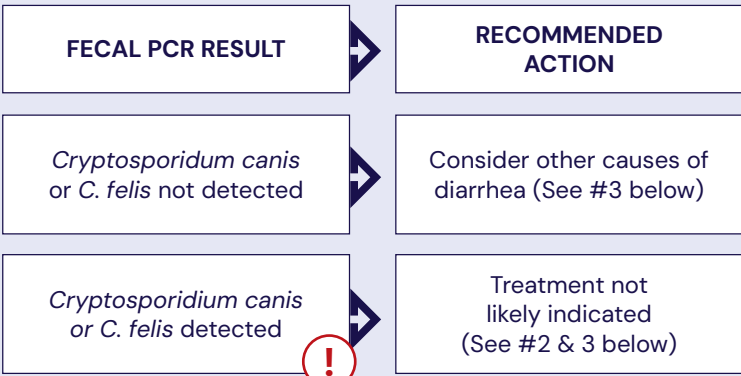


Potential (LOW) Zoonotic Risk!
See Box 4 – Risk Assessment

Pet Evaluated for Clinical Signs

KeyScreen™ GI Parasite PCR *Cryptosporidium* spp. Algorithm

Pet exhibits clinical signs of infection (diarrhea). & *Cryptosporidium* spp. detected



Potential (LOW) Zoonotic Risk!
See Box 4 – Risk Assessment

1: Fecal Testing

The KeyScreen™ GI Parasite PCR panel detects 20 GI parasites and markers for zoonotic potential of *Giardia* and hookworm treatment resistance. It can be used for routine monitoring/screening and for patients with clinical signs, e.g., diarrhea.

Routine endoparasite monitoring (wellness/screening):

- The Companion Animal Parasite Council (CAPC) recommends fecal testing **four times/year in the first year of life and twice/year for adult pets.**
- The Canadian Parasitology Expert Panel (CPEP) recommends fecal testing **twice/year in the first six months of life, and one to two times/year for dogs and cats over six months. Risk factors (#4) may impact (increase) advised testing frequency.**

2: Management/Treatment

Specific antimicrobial treatment for *Cryptosporidium* spp. is not typically needed or likely to be effective.

Antimicrobial use should be reserved for severe cases with consistent clinical signs, i.e., small bowel diarrhea. If drug treatment is pursued, the goal of therapy is improvement of clinical signs.

Pharmaceutical Treatment:

- Drug and other treatment recommendations: <https://capcvet.org/guidelines/cryptosporidium/>

Non-Pharmaceutical Treatment:

- Supportive care
- Dietary management (higher-fiber, probiotics)
- Picking up feces immediately to reduce environmental contamination
- Cleaning of environment
- Disinfection if possible/practical

3: Test Interpretation

Persistent clinical signs or infection (despite appropriate treatment) in dogs and cats is most likely due the following:

- A co-infection or alternate underlying disease as a cause of (or contributor to) clinical signs, e.g., another pathogen, chronic enteropathy or neoplasia
- Environmental re-infection
- Compliance concerns, e.g., medication, dosing, duration
- Immunosuppression
- Drug resistance

To help determine causation, and rule out environmental reinfection, retesting (optimally PCR to determine speciation) post-treatment (Box 2) can be considered.

4: Risk Assessment — Zoonotic Risk

The KeyScreen GI Parasite PCR panel differentiates between *Cryptosporidium* spp. by detecting *C. canis* and *C. felis*.

Human infection is typically associated with *C. parvum* genotypes and *C. hominis*, and risk of infection with *C. canis* or *C. felis* is considered low. Information on specific *Cryptosporidium* spp. can aid zoonotic risk communication and guide prudent antimicrobial use.

Management should be informed by individual pet and human risk factors. Zoonotic concern is highest with specific groups, i.e., young children, the elderly, immunocompromised, or pregnant individuals.

Zoonotic Potential *Cryptosporidium* spp.:

- If *Cryptosporidium* spp. is detected, zoonotic risk potential should be communicated, and a PCR test may be considered to determine level of zoonotic risk, particularly with immunocompromised individuals.
- If either *C. felis* or *C. canis* are detected, pet-owners can be assured that zoonotic risk is typically low.