



Pocket guide: antimicrobial prescribing for common small animal diseases

Ten tenets of antimicrobial prescribing

- Make a diagnosis.
- Follow antimicrobial guidelines.
- Consider host, likely disease agent, and drug when selecting an antimicrobial.
- Use the correct dose and duration.
- Document indication, drug, dose, frequency, route, and duration.
- Incorporate watchful waiting, as appropriate.
- Regularly review the need for therapy.
- Teach clients to administer antimicrobials.
- Do not prescribe antimicrobials “just in case.”
- Use a tiered approach, choosing antimicrobials with lower importance to human medicine first.

Tips for client satisfaction

- Recommend specific symptomatic therapy when antibiotics are not needed.
- Provide a plan if symptoms do not improve.
- Educate clients. Combine positive treatment recommendations with explanations for why antibiotics are not needed.
- Answer questions.
- When using delayed prescriptions, write an expiration date on the prescriptions so it can be filled only during the watchful waiting period.

Watchful waiting: Delay prescribing for conditions that often self-resolve. Communicate the plan for watchful waiting, letting the client know when to be concerned or contact you for follow-up.

ANTIBIOTICS



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Feline bacterial upper respiratory infection

Doxycycline	5 mg/kg PO q12hr	7-10 days
Amoxicillin	22 mg/kg PO q12hr	

Consider watchful waiting if clinical signs present <10 days.

If clinical signs present >10 days or worsen over 5-7 days, antibiotic therapy (above) might be warranted.

Canine infectious respiratory disease

Doxycycline	5 mg/kg PO q12hr	7-10 days
Amoxicillin-clavulanate	11 mg/kg PO q12hr	

Consider watchful waiting if clinical signs present <10 days.

Treat within 10 day period if fever, lethargy, or inappetence present with mucopurulent discharge.

Bacterial pneumonia

Pneumonia without sepsis	Pneumonia with sepsis
Ampicillin, ampicillin-sulbactam, or cefazolin.	Parenteral fluoroquinolone plus ampicillin
Use oral equivalents if IV is not needed.	OR parenteral fluoroquinolone plus ampicillin-sulbactam
	OR parenteral fluoroquinolone plus clindamycin
	OR base on culture and susceptibility testing

Treatment duration of 10 days likely to be sufficient in most cases.

Canine superficial pyoderma

Cephalexin	15-30 mg/kg PO q12hr	Re-evaluate in 2 weeks.
Clindamycin*	5.5-10 mg/kg PO q12hr	

Topical treatment with antiseptics alone may be sufficient for mild or focal cases.

Frequent re-evaluation is needed to determine treatment duration.

**Staph.* strains resistant to erythromycin may develop resistance to clindamycin during treatment.

Sporadic bacterial cystitis

Amoxicillin	10-15 mg/kg PO q12hr	3-5 days
Trimethoprim-sulfa	15-30 mg/kg PO q12hr	

UTI is uncommon in young cats. Consider alternative diagnoses, such as urolithiasis and feline idiopathic cystitis.

Recurrent bacterial cystitis

Definition: ≥ 3 UTIs in 12 months or ≥ 2 in 6 months.

Perform diagnostics (e.g., urinary tract imaging) to identify predisposing cause.

Treat as for sporadic bacterial cystitis and/or based on culture and susceptibility testing.

Pyelonephritis

Enrofloxacin	5-20 mg/kg PO q24hr (dog)	10-14 days
Marbofloxacin	2.7-5.5 mg/kg PO q24hr	
Cefpodoxime	5-10 mg/kg PO q24hr (dog)	

Acute diarrhea

In most cases, antibiotics do not hasten recovery and cause further dysbiosis.

Consider dietary, prebiotic, probiotic, and supportive therapy.

Acute hemorrhagic diarrheal syndrome with sepsis

Amoxicillin	10-15 mg/kg PO q12hr	5-7 days
Metronidazole	10-15 mg/kg PO q12hr	

Antibiotics indicated **only** with degenerative left shift/sepsis.