

DOES THIS DOG NEED ANTIBIOTICS?

Veterinarians are leaders and stewards in preserving the effectiveness of antimicrobials, using antimicrobials, such as antibiotics, only when they are needed to treat an animal's medical condition. Antibiotics are only needed for treating certain infections caused by bacteria—viral illnesses cannot be treated with antibiotics.



Common condition	Is the patient feverish or lethargic?	Common cause			Is culture and antimicrobial susceptibility recommended before prescribing?	Are systemic antibiotics needed?	Considerations for initial antimicrobial therapy	Proposed duration
		Bacteria	Virus	Parasites				
Subclinical bacteriuria (no LUTS)	No	●			No		Not recommended	
Bacterial cystitis - sporadic	No	●			Yes	Yes	Amoxicillin (11-15 mg/kg PO q8-12 h) OR Trimethoprim-sulfonamides (15-30 mg/kg PO q12 h)	3-5 days
Bacterial cystitis - recurrent	No	●			Yes	Yes	Amoxicillin (11-15 mg/kg PO q8-12 h) OR Trimethoprim-sulfonamides (15-30 mg/kg PO q12 h)	Re-infection: 3-5 days Persistent: 7-14 days
Pyelonephritis	Yes	●			Yes	Yes	Based on culture & antimicrobial susceptibility testing (using systemic breakpoints not urine)*	10-14 days
Prostatitis	Yes	●			Yes	Yes	Based on culture & antimicrobial susceptibility testing (using systemic breakpoints not urine)*	Acute: 4 weeks Chronic: 4-6 weeks
Juvenile vaginitis	No	●			No		Not recommended	
Canine infectious respiratory disease complex (CIRDC), <=10 days	No	●	●		No		Not recommended	
Canine infectious respiratory disease complex (CIRDC), <=10 days	Yes, also with mucopurulent discharge	●	●		Maybe*	Yes	Doxycycline 5 mg/kg PO q12h or 10 mg/kg PO q24h	7-10 days
Bronchitis	Maybe*	●	●	●	Maybe*	Severe disease only	Doxycycline 5 mg/kg PO q12h or 10 mg/kg PO q24h	7-10 days (including 7 days past clinical resolution)
Pneumonia	No	●			Maybe*	Yes	Doxycycline 5 mg/kg PO q12h or 10 mg/kg PO q24h; OR based on culture & susceptibility testing	10-14 days to start (up to 4-6 weeks)
Pneumonia	Yes	●			Maybe*	Yes	Parenteral fluoroquinolone + penicillin or clindamycin (choose one) while awaiting culture & susceptibility test results*	10-14 days to start (up to 4-6 weeks)
Diarrhea, acute	No	●	●	●	No		Not recommended	
Diarrhea, chronic (>10 days)	No	●	●	●	Only for purposes of organism identification*	Maybe	Identify organisms by PCR or culture; Do not use susceptibility testing to predict clinical efficacy	

*Please review references for more information on diagnostic testing and treatment as well as strength of evidence behind recommendations.

References

- ISCAID, UTI, 2019. <https://doi.org/10.1016/j.tvjl.2019.02.008>
- Weese JS, Blondeau JM, Boothe D, et al. Antimicrobial use guidelines for treatment of urinary tract disease in dogs and cats: Antimicrobial Guidelines Working Group of the International Society for Companion Animal Infectious Diseases. *Vet Med Int*2011;2011:263768.
- ISCAID, Resp, 2017. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/jvim.14627>
- Lappin MR, Blondeau JM, Boothe D, et al. Antimicrobial use guidelines for treatment of respiratory tract disease in dogs and cats: Antimicrobial Guidelines Working Group of the International Society for Companion Animal Infectious Diseases. *J Vet Intern Med*2017;31:279–294.
- ISCAID, Pyoderma, 2014. <https://doi.org/10.1111/vde.12118>
- Hillier A, Lloyd DH, Weese JS, et al. Guidelines for the diagnosis and antimicrobial therapy of canine superficial bacterial folliculitis (Antimicrobial Guidelines Working Group of the International Society for Companion Animal Infectious Diseases). *Vet Dermatol*2014;25:163–e43.
- CLSI. *Understanding Susceptibility Test Data as a Component of Antimicrobial Stewardship in Veterinary Settings*. 1st ed. CLSI report VET09. Wayne, PA: Clinical and Laboratory Standards Institute; 2019.

Common procedures or conditions for which antibiotics are not recommended:

- Periodontal disease
- Dental cleaning or dental extraction (no osteomyelitis)
- Elective spay/neuter surgery

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