

do's and don'ts

# ANTIMICROBIAL THERAPY



**Responsible antimicrobial use preserves and optimizes the efficacy of antimicrobials and minimizes the selection for antimicrobial-resistant bacteria, thereby protecting public and animal health.**

## **GENERAL CONSIDERATIONS FOR JUDICIOUS ANTIMICROBIAL USE**

- Consider and rule out nonbacterial causes
- Consider history and signalment when making a diagnosis of bacterial infection
- Consider other therapeutic options
- Investigate and treat underlying nonbacterial diseases
- Identify the likely pathogen and use the most narrow-spectrum agent available
- Utilize culture and susceptibility results
- Refer to published guidelines
- Monitor response to treatment and client compliance to ensure satisfactory outcome
- Perform further investigation before switching or combining antimicrobials if there is perceived treatment failure

**For more information:**  
[www.avma.org/AntibioticUse](http://www.avma.org/AntibioticUse)

# do's and don'ts ANTIMICROBIAL THERAPY



## DERMATOLOGIC DISEASE

- Recommend cytologic evaluation of lesions in all cases of suspect pyoderma
- Microbial culture and susceptibility should be performed in conjunction with other diagnostics to investigate recurrent or refractory pyoderma
- Use topical antimicrobials and medicated shampoos as an alternative to systemic antimicrobials when possible

## URINARY TRACT DISEASE

- Avoid diagnosis of infection based on free-catch urine samples
- Confirm infection with quantitative cultures

## DENTAL DISEASE

- Avoid antimicrobial use for routine dental procedures in healthy patients
- If indicated (e.g. tooth root abscess), choose antimicrobials likely to be effective against known oral pathogens
- Antimicrobials are not a substitute for appropriate dental management

## REPRODUCTIVE DISEASE

- Avoid antimicrobial use in healthy bitches and studs prior to breeding
- Simple juvenile vaginitis in dogs does not require antimicrobial therapy

## RESPIRATORY DISEASE

- In dogs and cats, use of antimicrobials is generally unnecessary for acute, uncomplicated URT disease
- Recommend diagnostics to identify an underlying cause for chronic respiratory disease (greater than 10 days duration)

## GASTROINTESTINAL DISEASE

- Avoid use of antimicrobials in healthy pets with diarrhea; provide supportive therapy instead (e.g. diet, fluid therapy)
- Make a diagnosis before prescribing antimicrobials
- Fecal smear cytology is not reliable for diagnosis of enteropathogenic bacterial infections

## PERI-OPERATIVE USE

- Adhere to best practices for infection control in the operating room
- Avoid prophylactic antimicrobials for routine surgeries
- If prophylactic antimicrobials are used, administer them before surgery and do not administer them beyond the perioperative period

## VECTOR-BORNE DISEASE

- Recommend preventive treatments for ectoparasite control to prevent infection and spread of vector-borne pathogens
- Avoid antimicrobial therapy in healthy animals that are seropositive for vector-borne pathogens; seropositivity does not imply active infection



do's and don'ts

# ANTIMICROBIAL THERAPY



## DERMATOLOGIC DISEASE

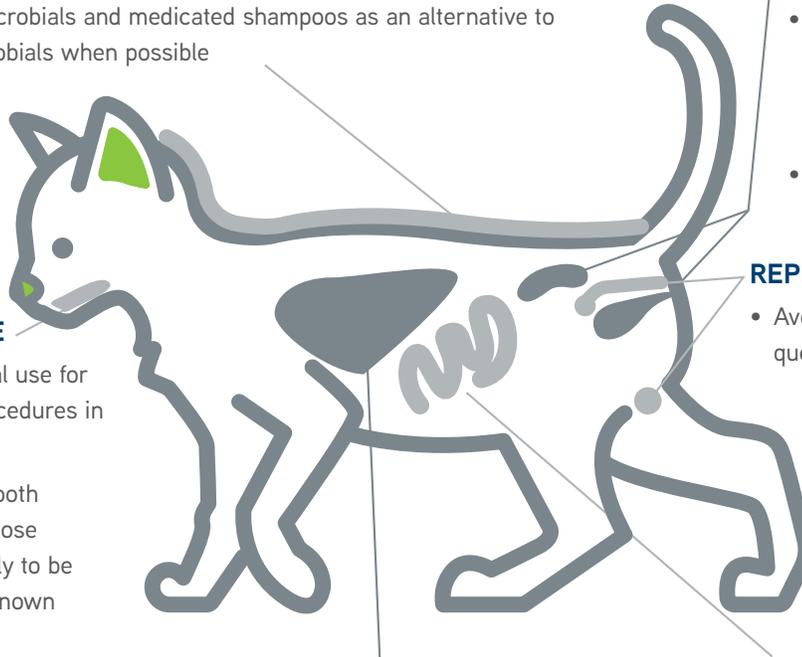
- Recommend cytologic evaluation of lesions in all cases of suspect pyoderma
- Microbial culture and susceptibility should be performed in conjunction with other diagnostics to investigate recurrent or refractory pyoderma
- Use topical antimicrobials and medicated shampoos as an alternative to systemic antimicrobials when possible

## URINARY TRACT DISEASE

- Avoid diagnosing UTI based upon positive culture of free catch urine samples.
- Recommend culture before prescribing antimicrobials for cats <10 years of age with lower urinary tract signs
- Confirm infection with quantitative cultures

## DENTAL DISEASE

- Avoid antimicrobial use for routine dental procedures in healthy patients
- If indicated (e.g. tooth root abscess), choose antimicrobials likely to be effective against known oral pathogens
- Antimicrobials are not a substitute for appropriate dental management



## REPRODUCTIVE DISEASE

- Avoid antimicrobial use in healthy queens and toms prior to breeding

## RESPIRATORY DISEASE

- In dogs and cats, use of antimicrobials is generally unnecessary for acute, uncomplicated URT disease
- Recommend diagnostics to identify an underlying cause for chronic respiratory disease (greater than 10 days duration)

## GASTROINTESTINAL DISEASE

- Avoid use of antimicrobials in healthy pets with diarrhea; provide supportive therapy instead (e.g. diet, fluid therapy)
- Make a diagnosis before prescribing antimicrobials
- Fecal smear cytology is not reliable for diagnosis of enteropathogenic bacterial infections



## PERI-OPERATIVE USE

- Adhere to best practices for infection control in the operating room
- Avoid prophylactic antimicrobials for routine surgeries
- If prophylactic antimicrobials are used, administer them before surgery and do not administer them beyond the perioperative period



## VECTOR-BORNE DISEASE

- Recommend preventive treatments for ectoparasite control to prevent infection and spread of vector-borne pathogens
- Avoid antimicrobial therapy in healthy animals that are seropositive for vector-borne pathogens; seropositivity does not imply active infection