**Protecting your antibacterials?**

**Write your practice policy on empirical antibacterial use in the boxes below**

**Periodontal disease**
- Amoxicillin OR amoxicillin/clavulanate OR 1st generation cephalosporin OR metronidazole + spiramycin. With or without chloramphenicol.
  - Practice Policy: 

**Respiratory infections**
- Bacterial pneumonia (including aspiration):
  - Practice Policy: 
  - Clindamycin + metronidazole OR amoxicillin + metronidazole + cefuroxime.
  - Practice Policy: 
- Dopamine + metronidazole OR cefuroxime.
  - Practice Policy: 
- Listeria monocytogenes OR MRSA OR Staphylococcus aureus.
  - Practice Policy: 
- S. pneumoniae + cefuroxime OR amoxicillin + metronidazole + azithromycin.
  - Practice Policy: 

**Bacterial rhinitis, chronic rhinitis and sinusitis**
- Practice Policy: 
- Amoxicillin + metronidazole OR amoxicillin + clavulanate.
  - Practice Policy: 

**Gastrointestinal infections**
- Acute diarrhea with complications: amoxicillin/clavulanate OR 1st generation cephalosporin.
  - Practice Policy: 
- Norfloxacin: leave plus topical application (alone or combined).
  - Practice Policy: 
- Metronidazole + amoxicillin + clarithromycin.
  - Practice Policy: 
- Cefuroxime + clavulanate (if clinically significant): enrofloxacin.
  - Practice Policy: 
- Chloramphenicol: enrofloxacin OR amoxicillin OR ampicillin OR cefalexin.
  - Practice Policy: 

**Gastrointestinal bleeding or bacterial translocation:**
- Practice Policy: 
- Metronidazole + amoxicillin + clavulanate OR amoxicillin + cefalexin + metronidazole OR amoxicillin + clavulanate.
  - Practice Policy: 
- Tetracycline + metronidazole OR clavulanate/ticarcillin OR 0.6% enrofloxacin OR 0.2% marbofloxacin OR 0.1–0.5% silver sulfadiazine (diluted in saline).
  - Practice Policy: 

**Genitourinary infections**
- Cystitis, pyelonephritis (urinary tract infection): amoxicillin/clavulanate or trimethoprim/sulfadiazine. Many cats with cystitis do not have bacterial infections – routine antibacterials not required.
  - Practice Policy: 
- Endometritis/Pyometra: amoxicillin/clavulanate OR trimethoprim/sulfadiazine.
  - Practice Policy: 
- Suspected Leptospirosis: amoxicillin OR penicillin G + clavulanate for carriers. Amoxicillin treat bacteraemia but do not address carrier state.
  - Practice Policy: 
- Prostatitis (acute): enrofloxacin OR trimethoprim/sulfadiazine. Culture required in chronic cases.
  - Practice Policy: 
- Pyelonephritis (acute): trimethoprim/sulfadiazine. Culture required in chronic cases.
  - Practice Policy: 
- Struvite uroliths (dogs): amoxicillin + clavulanate OR trimethoprim/sulfadiazine.
  - Practice Policy: 

**Orthopaedic infections**
- Diclofenac/chlorhexidine + cefazolin (if 1st generation cephalosporin OR clindamycin. Long courses (3–6 weeks) may be needed.
  - Practice Policy: 
- Septic arthritis: amoxicillin/clavulanate OR 1st generation cephalosporin. 
  - Practice Policy: 

**Skin infections**
- Site and other traumatic wounds: Listeria, aerobic, anaerobic and fungal. In cut-take amoxicillin first choice otherwise choice is for Pyoderma. May include topical/epidermal injuries: metronidazole OR amoxicillin + clavulanate + spiramycin.
  - Practice Policy: 
- Infected traumatic wound: amoxicillin/clavulanate OR 1st generation cephalosporin.
  - Practice Policy: 
- Pyoderma:
  - Practice Policy: 
- Topical therapy:
  - Practice Policy: 
- Suspected pyoderma:
  - Practice Policy: 
- Purulent or suppurative pyoderma: amoxicillin + metronidazole OR azithromycin OR clarithromycin.
  - Practice Policy: 
- Antifungal drops: miconazole OR butoconazole OR ketoconazole.
  - Practice Policy: 

**Ear infections**
- Otitis exterma (granulomatous):
  - Practice Policy: 
- Topical: basic acid OP + gentamicin OP or enrofloxacin + metronidazole OR enrofloxacin + enrofloxacin.
  - Practice Policy: 
- Otitis exterma (suppurative) or otitis media:
  - Practice Policy: 
- Topical: choice (including ear cleaners) as for erythroceruminous OE. Enrofloxacin, marbofloxacin, aqueous gentamicin appear to be effective in the middle ear. Multiple resistant infections: 1.7% chloramphenicol OR 0.05% enrofloxacin OR 0.2% metronidazole OR 0.1–0.5% silver sulfadiazine (diluted in saline).
  - Practice Policy: 
- Systemic:
  - Practice Policy: 

**Eyes infections**
- Bacterial conjunctivitis:
  - Practice Policy: 
- Topical: basic acid acid OR gentamicin OR chloramphenicol.
  - Practice Policy: 
- Suspected Chlamydophila:
  - Practice Policy: 
- Systemic: doxycycline OR enrofloxacin. Topical basic acid may be added ifdesired.
  - Practice Policy: 

**Miscellaneous**
- Endocarditis: amoxicillin/clavulanate + enrofloxacin OR amoxicillin/clavulanate + metronidazole.
  - Practice Policy: 
- Mastitis: amoxicillin/clavulanate OR trimethoprim/sulfadiazine.
  - Practice Policy: 
- Suspected Mycoplasma haemofelis (feline haemophila) or glycyrhrinum: doxycycline OR enrofloxacin.
  - Practice Policy: 
- Neutropenia: M-space antibacterial required. Severe but asymptomatic trimethoprim/sulfadiazine. Severe and with clinical signs: tetracycline or metronidazole.
  - Practice Policy: 
- Septic peritonitis: amoxicillin/clavulanate OR cephalosporin + metronidazole OR enrofloxacin OR amoxicillin + spiramycin. Add metronidazole if anaerobic suspected.
  - Practice Policy: 
- Septicarthritis: amoxicillin + cephalosporin OR gentamicin OR clindamycin + enrofloxacin OR amoxicillin OR enrofloxacin + amoxicillin OR clavulanate.
  - Practice Policy: 

**Follow the Cascade**

**Second and Third Choice Antibacterials**
Thesethree include amikacin, 3rd generation and 4th generation cephalosporins (including extended-spectrum) and fluoroquinolones. These antibacterials should be used only when other agents are inappropriate (e.g. in penicillin-sensitive individuals) or ineffective, and/or sensitometry testing indicates that they will be effective.

**Surgeon’s prophylaxis**
Prophylactic antibacterial use is not a substitute for good aseptic technique.
- Preoperative antimicrobial is appropriate:
  - For prolonged surgery (>1.5 hours) or surgery involving implants.
  - For dural or meningeal penetration.
  - Where infections would be catastrophic (e.g. in CNS).
  - Where there is an evident break in asepsis (e.g. for bovine surgery).
- For dental procedures where there is periodontal disease for contaminated wounds or pre-existing infection.
  - In most cases:
    - Intravenous amoxicillin/clavulanate OR 1st generation cephalosporin.
    - Suspected aerobic or anaerobic involvement is highly likely (e.g. periodontal disease).
    - add or substitute metronidazole.
  - Significant bowel leakage in an otherwise metabolically stable animal
    - combination may be most appropriate, e.g. ampicillin + metronidazole OR gentamicin.
  - If patient volume-depleted, replace amoxicillin with flucloxacillin.
  - Practice Policy:

**Antibiotics not indicated unless cytology/and/or culture is positive**
- Chronic bronchitis/keratoconjunctivitis:
  - For symptomatic relief.
  - Aspergillosis:
  - Systemic therapy for fungal heart failure
  - Urinary:
  - For some lower urinary tract disease (including stricture urolithiasis)
  - Urinary incontinence.
  - Gastroenteritis:
  - Acute vomiting (uncomplicated)
  - Acute diarrhoea (uncomplicated)
  - Chronic gastroenteritis (Continued treatment for antibiotic-responsive diarrhoea)
  - Pancreatitis (uncomplicated)
  - Surgery:
  - Routine castration and ovariohysterectomy
  - Removal of uninfected skin mass not involving major reconstruction
  - Metabolic:
  - Polyuria, polydipsia (unless pyrogenic focus suspected)
  - Weight loss.
  - Skin and ears:
  - Allergic dermatitis
  - Acute non-specific pruritus, scaling, nodules, crusts, etc.

**DON’T USE**

There are very strong arguments that antibacterials with restricted use in human medicine (e.g. cephalosporins, tetracyclines, vancomycin) should not be used in animals under any circumstances.

**BSAVA Small Animal Formulary, 6th edition.**

For further information on individual drugs and dosages, see BSAVA Small Animal Formulary, 6th edition.