

Categorization of Prescription and Over-the-Counter Veterinary Antibiotics by Importance in Human Medicine

Health Canada's Veterinary Drugs Directorate has categorized antimicrobials based on their importance in human medicine¹. The table below identifies the antimicrobial classes with veterinary antibiotic products. If a class has veterinary antibiotic products, the antibiotics available over-the-counter and by prescription are listed.

Table. Categorization of Prescription and Non-prescription Veterinary Antibiotics by Importance in Human Medicine

Health Canada category of importance in human medicine	Antimicrobial class	Veterinary Antibiotics	
		Over-the-Counter	Prescription
I Very High Importance	Carbapenems		
	Cephalosporins - the 3rd and 4th generations		ceftiofur, cefpodoxime, ceftiofur
	Fluoroquinolones		enrofloxacin, danofloxacin, difloxacin, orbifloxacin, marbofloxacin
	Glycopeptides		
	Glycylcyclines		
	Ketolides		
	Lipopeptides		
	Monobactams		
	Nitroimidazoles (metronidazole)		
	Oxazolidinones		
	Penicillin-β-lactamase inhibitor combinations		amoxicillin & clavulanic acid
	Polymyxins (colistin)	polymyxin B ^a	
Therapeutic agents for tuberculosis (e.g. ethambutol, isoniazid, pyrazinamide, and rifampin)			
II High Importance	Aminoglycosides (except topical agents)	apramycin, dihydrostreptomycin, neomycin, streptomycin	amikacin, gentamicin, neomycin
	Cephalosporins - the first and second generations		cefadroxil, cephalixin, cephalixin
	Fusidic acid		fusidic acid
	Lincosamides	lincomycin	clindamycin, pirlimycin
	Macrolides	erythromycin, tilmicosin, tylosin	gamithromycin, tildipirosin, tilmicosin, tulathromycin, tylvalosin
	Penicillins	penicillin G	amoxicillin, ampicillin, cloxacillin
	Quinolones (except fluoroquinolones)		
	Streptogramins	virginiamycin	
Trimethoprim-sulfamethoxazole		trimethoprim, ormetoprim, sulfonamides	
III Medium Importance	Aminocyclitols	spectinomycin	
	Aminoglycosides (topical agents)	neomycin	
	Bacitracins	bacitracin	
	Coumarin ^b	novobiocin	
	Fosfomycin		
	Nitrofurans	nitrofurazone	nitrofurantoin
	Phenicol		chloramphenicol, florfenicol
	Pleuromutilins ^b	tiamulin	tiamulin
	Sulfonamides	variety of sulfonamides	
	Tetracyclines	chlortetracycline, oxytetracycline, tetracycline	doxycycline
Trimethoprim			
IV Low Importance	Flavophospholipols	bambermycin	
	Ionophores	lasalocid, maduramicin, monensin, narasin, salinomycin	

^a Topical and intramammary products.

^b Antimicrobial class not included in Health Canada's categorization. Categorization based on personal communication with Health Canada.

¹ <http://www.phac-aspc.gc.ca/cipars-picra/2008/6-eng.php#Cat;>