

Supplementary material

Table S1. Number of studies reporting use of antibiotics per family and active ingredient, by livestock production, soil, and wastewater

Antibiotic class and active ingredients	Total studies (N)	Livestock	Soil	Wastewater
Penicillin				
Natural Penicillins	15	3, 4, 5, 7, 8, 13, 14, 15, 54, 55, 68, 106, 120, 133, 152		
Aminopenicillins	9	2, 6, 10, 11, 12, 15, 40, 151	1	
Antistaphylococcal Penicillins	4	15, 40, 55		48
Tetracyclines				
Chlortetracycline	10	20, 22, 15, 36, 107	17, 72, 83	31, 28
Doxycycline	5	15, 55, 107		31, 28
Oxytetracycline	30	8, 21, 10, 12, 27, 32, 15, 34, 36, 40, 55, 61, 68, 78, 107, 112, 118, 120, 149, 150	16, 18	28, 29, 31, 38, 132
Tetracycline	45	19, 3, 23, 26, 33, 35, 36, 41, 54, 55, 70, 74, 75, 76, 79, 101, 107, 108, 121, 122	80, 81, 82, 84, 86, 109, 110, 131, 154, 155, 156	30, 31, 37, 28, 101, 103, 146, 147, 148, 153
Aminoglycosides				
Aminoglycosides	14	3, 4, 2, 5, 38, 39, 15, 37, 54, 55, 77, 143, 144, 145		
Macrolides	1			104
Macrolides C14	3	15,		37, 48
Macrolides C16	7	40, 9, 41, 15, 55		31, 48
Sulfonamides	65	25, 17, 2, 42, 43, 21, 23, 24, 12, 50, 51, 52, 39, 15, 35, 53, 54, 55, 64, 65, 79, 87, 88, 91, 92, 93, 94, 95, 97, 98, 99, 100, 157, 158, 123, 124, 125, 126, 127, 128, 129, 130	72, 73, 80, 81, 82, 84, 89, 90, 96, 110, 111, 136, 142	31, 44, 45, 46, 47, 48, 49, 37, 67, 103
Diaminopyrimidines	1			31
Quinolones	11	27, 35, 66, 79, 113	82, 85, 102, 164, 165	59
Quinolones 1G	5	56, 27, 15	81, 135	
Quinolones 2G (Fluoroquinolones)	24	24, 25, 54, 55, 15, 37, 28, 71, 114, 115, 116, 117, 119, 120, 134, 138, 139, 140, 159, 160		48, 57, 58, 141
Polypeptides	2	41, 15		
Polypeptides cyclic	1	15		
Cephalosporins				
Cephalosporin 3G	3	40, 55, 15		

Cephalosporin 4G	1	15		
Phenicol	14	16, 43, 12, 15, 62, 63, 69, 99, 161	105, 162, 163	37, 60
Lincosamides	7	25,15, 25, 9, 137	16	31
Pleuromutilins	1	21		
Ionophores	1	15		
Streptogramins	1	15		

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