

National Antimicrobial Resistance Monitoring System - Animal Arm

Table 1. Percent Resistance in *Salmonella* from Slaughter^a Cattle

Antimicrobial	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of Isolates Tested	24	284	1610	1388	893	1008	670	607	329	389	439	443	200	247	340
Amikacin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Not Tested
Amoxicillin/Clavulanic Acid	8.3	2.5	3.9	9.9	11.8	17.7	21.0	13.5	21.0	18.5	15.5	16.5	15.0	21.5	14.7
Ampicillin	12.5	9.2	12.5	18.7	17.9	23.9	28.1	19.3	26.7	22.4	20.0	21.7	22.5	26.3	17.1
Apramycin	0.0	0.0	0.2	0.2	0.1	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
Azithromycin	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.3
Cefoxitin	Not Tested	Not Tested	Not Tested	9.1	11.1	15.9	17.8	13.2	19.8	17.7	15.0	14.7	13.5	20.6	13.8
Ceftiofur	0.0	2.1	4.2	9.8	11.4	17.4	21.0	13.3	21.6	18.8	15.5	16.3	14.5	21.5	13.2
Ceftriaxone	0.0	2.1	3.9	9.9	11.3	17.3	21.0	13.5	20.7	18.5	15.9	16.0	14.5	21.5	14.4
Cephalothin	0.0	2.1	4.7	9.9	11.6	17.7	21.2	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
Chloramphenicol	4.2	5.6	8.5	15.1	16.5	20.6	25.1	17.6	21.9	19.8	20.0	19.6	21.0	25.1	17.9
Ciprofloxacin ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.6
Gentamicin	0.0	1.8	1.6	2.1	2.1	2.6	2.7	1.8	2.4	3.9	1.6	1.6	2.0	4.9	2.4
Imipenem	Not Tested	Not Tested	Not Tested	Not Tested	0.0	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
Kanamycin	8.3	9.5	7.1	6.6	6.9	10.1	13.7	8.9	13.1	9.5	7.7	9.9	9.0	12.6	6.2
Nalidixic Acid	0.0	0.4	0.1	0.4	0.4	0.4	0.4	2.0	1.5	0.5	0.7	0.7	1.0	2.8	1.8
Streptomycin	12.5	16.2	15.4	21.3	20.3	25.9	28.7	20.9	24.3	23.7	19.8	23.0	22.0	26.7	19.4
Sulfonamides (Sulfamethoxazole: 1997-2003, Sulfizoxazole: 2004-2011)	20.8	15.5	15.0	19.9	19.7	22.3	25.1	22.7	27.4	24.2	21.6	24.8	24.5	26.3	20.0
Tetracycline	25.0	24.3	20.9	25.8	26.3	32.0	36.9	31.8	34.0	30.3	27.3	29.3	29.0	33.6	30.6
Ticarcillin	12.5	8.5	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
Trimethoprim/ Sulfamethoxazole	4.2	2.5	2.4	2.2	2.6	2.5	3.3	1.5	4.9	4.6	3.0	4.5	1.5	4.5	1.8

^a Isolates obtained from slaughter processing plants (carcass swabs & ground product).

^b In this table, the revised ciprofloxacin breakpoints from the CLSI M100-S22 document, published in January 2012, were used for interpretation. In previous reports the ciprofloxacin breakpoints from the CLSI M100-S21 were used.