

Bovine 2011

Susceptibility profile of Bovine pathogens received at ISU VDL in 2011

Data reported as: % susceptible (# isolates tested)¹

	B tre	E coli	H som	M bov	M haem	P mult	Salm B ²	Salm C2 ²	Salm D ²	Salm E ²	Salm sp
Ampicillin	50% (6)	25% (302)	88% (67)	100% (25)	63% (200)	98% (129)	48% (33)	67% (12)	20% (46)	88% (16)	50% (4)
Ceftiofur	67% (6)	54% (302)	100% (67)	100% (25)	100% (200)	100% (129)	76% (33)	67% (12)	22% (46)	94% (16)	75% (4)
Chlortetracycline	33% (6)	11% (302)	97% (67)	100% (25)	63% (200)	93% (129)	33% (33)	50% (12)	2% (46)	69% (16)	75% (4)
Clindamycin	17% (6)	0% (302)	49% (67)	4% (25)	1% (200)	1% (129)	0% (33)	0% (12)	0% (46)	0% (16)	0% (4)
Danofloxacin	17% (6)	53% (302)	73% (67)	NI	100% (200)	82% (129)	96% (33)	100% (12)	84% (46)	100% (16)	100% (4)
Enrofloxacin	33% (6)	57% (302)	76% (67)	100% (25)	60% (200)	87% (129)	94% (33)	100% (12)	100% (46)	100% (16)	100% (4)
Florfenicol	83% (6)	10% (302)	94% (67)	100% (25)	80% (200)	90% (129)	30% (33)	50% (12)	7% (46)	50% (16)	25% (4)
Gentamicin	83% (6)	65% (302)	30% (67)	100% (25)	66% (200)	75% (129)	88% (33)	100% (12)	100% (46)	94% (16)	100% (4)
Neomycin	33% (6)	38% (302)	0% (67)	100% (25)	53% (200)	20% (129)	82% (33)	100% (12)	46% (46)	94% (16)	100% (4)
Oxytetracycline	17% (6)	9% (302)	28% (67)	100% (25)	35% (200)	53% (129)	33% (33)	50% (12)	2% (46)	69% (16)	75% (4)
Penicillin	17% (6)	0% (302)	84% (67)	0% (25)	23% (200)	64% (129)	0% (33)	0% (12)	0% (46)	0% (16)	0% (4)
Spectinomycin	0% (6)	0% (302)	52% (67)	88% (25)	60% (200)	68% (129)	0% (33)	0% (12)	0% (46)	0% (16)	0% (4)
Sulfadimethoxine	33% (6)	13% (302)	10% (67)	100% (25)	13% (200)	6% (129)	6% (33)	8% (12)	0% (46)	0% (16)	0% (4)
Tiamulin	50% (6)	1% (302)	100% (67)	100% (25)	94% (200)	65% (129)	0% (33)	0% (12)	0% (46)	0% (16)	0% (4)
Tilmicosin	50% (6)	0% (302)	94% (67)	96% (25)	46% (200)	60% (129)	0% (33)	0% (12)	0% (46)	0% (16)	0% (4)
Trimethoprim/Sulphamethoxazole	83% (6)	46% (302)	90% (67)	100% (25)	1% (200)	1% (129)	79% (33)	100% (12)	76% (46)	94% (16)	100% (4)
Tulathromycin	NI	NI	83% (67)	NI	62% (200)	84% (129)	NI	NI	NI	NI	NI
Tylosin (Tartrate/Base)	33% (6)	NI	64% (67)	NI	1% (200)	2% (129)	NI	NI	NI	NI	NI

Key:

- 1 Data is reported as: % susceptible (# isolates tested) - not all bacteria isolated at ISU VDL have been tested for antimicrobial susceptibility
2 See *Salmonella* serotype table for most common serotypes isolated within each group
3 Isolates resistant to oxacillin are interpreted as potentially methicillin resistant.
4 A result of <=2 ug/ml for Carbadox is a conservative indicator of bacterial inhibition by this antimicrobial agent. The result shown is based on pharmacokinetic research indicating an average Carbadox level of 4.5 mcg/ml in the small intestine of pigs fed a dose rate of 50 g/ton. (De Graff 1988).
5 Multidrug resistant isolates were found resistant to most classes of antimicrobial in the 1st round of testing. This table represents additional Disk Diffusion testing for those isolates.
- NA Not applicable
ND Not done
NI No interpretation

A equ - <i>Actinobacillus equuli</i>	H ecol - hemolytic <i>E. coli</i>	S aur - <i>Staphylococcus aureus</i>
A suis - <i>Actinobacillus suis</i>	H som - <i>Histophilus somni</i>	S beta- <i>Beta Streptococcus</i> species
Abua - <i>Acinetobacter</i> species	HPS - <i>Haemophilus parasuis</i>	S can - <i>Streptococcus canis</i>
Amy - <i>Actinomyces</i> species	K pneu - <i>Klebsiella pneumoniae</i>	S chol - <i>Salmonella choleraesuis</i>
APP - <i>Actinobacillus pleuropneumoniae</i>	M bov - <i>Moraxella bovis</i>	S dysg - <i>Streptococcus dysgalactiae</i>
B bron - <i>Bordetella bronchiseptica</i>	M haem - <i>Mannheimia haemolytica</i>	S epi- <i>Staphylococcus epidermidis</i>
B tre - <i>Bibersteinia trehalosi</i> (formerly <i>Pasteurella trehalosi</i>)	P aer - <i>Pseudomonas aeruginosa</i>	S equi - <i>Streptococcus equi</i>
Bact - <i>Bacteroides</i> group	P cab - <i>Pasteurella caballii</i>	S equus - <i>Streptococcus equisimilis</i>
C diff - <i>Clostridium difficile</i>	P mult - <i>Pasteurella multocida</i>	S pint - <i>Staph pseudintermedius</i>
C perf - <i>Clostridium perfringens</i>	Past - <i>Pasteurella</i> species	S suis - <i>Streptococcus suis</i>
Clos - <i>Clostridium</i> species	Pec - <i>Peptococcus</i> species	S ube - <i>Streptococcus uberis</i>
E coli - <i>Escherichia coli</i>	Pes - <i>Peptostreptococcus</i> species	S zoo - <i>Streptococcus zooepidemicus</i>
E fael - <i>Enterococcus faecalis</i>	Pmul A - <i>Pasteurella multocida</i> Type A	Salm sp- <i>Salmonella</i> species
E faem - <i>Enterococcus faecium</i>	Pmul D - <i>Pasteurella multocida</i> Type D	Salm B - <i>Salmonella</i> species group B
Enc - <i>Enterococcus</i> species	Prot - <i>Proteus</i> species	Salm C1 - <i>Salmonella</i> species group C1
Ente - <i>Enterobacter</i> species	Prp - <i>Propionibacterium</i> species	Salm C2 - <i>Salmonella</i> species group C2
Erys - <i>Erysipelothrix</i>	Pseu - <i>Pseudomonas</i> species	Salm D - <i>Salmonella</i> species group D
Fus - <i>Fusobacterium</i>	R equ - <i>Rhodococcus equi</i>	Salm E - <i>Salmonella</i> species group E
G ana - <i>Gallibacterium anatis</i>		