

Bovine Mastitis 2009-2011

Susceptibility profile of Mastitis pathogens received at ISU VDL in 2009-2011

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

	E coli	E faem	Ente	K pneu	P mult	S aur	S dysg	S epi	S ubc
Ampicillin	74% (38)	100% (2)	40% (5)	17% (6)	100% (5)	83% (88)	100% (24)	84% (19)	82% (34)
Ceftiofur	97% (38)	50% (2)	100% (5)	83% (6)	100% (5)	100% (88)	100% (24)	100% (19)	97% (34)
Cephalothin	76% (38)	50% (2)	0% (5)	67% (6)	100% (5)	100% (88)	100% (24)	100% (19)	100% (34)
Erythromycin	0% (38)	0% (2)	0% (5)	0% (6)	0% (5)	78% (88)	88% (24)	89% (19)	82% (34)
Oxacillin ³	0% (38)	0% (2)	0% (5)	0% (6)	40% (5)	99% (88)	92% (24)	50% (19)	76% (34)
Penicillin	0% (38)	50% (2)	0% (5)	0% (6)	80% (5)	84% (88)	100% (24)	79% (19)	47% (34)
Penicillin/Novobiocin	0% (38)	NI	NI	0% (6)	NI	100% (88)	100% (24)	100% (19)	97% (34)
Pirlimycin	0% (38)	50% (2)	0% (5)	0% (6)	0% (5)	77% (88)	88% (24)	84% (19)	74% (34)
Sulfadimethoxine	58% (38)	0% (2)	20% (5)	33% (6)	20% (5)	91% (88)	58% (24)	63% (19)	3% (34)
Tetracycline	47% (38)	50% (2)	80% (5)	67% (6)	40% (5)	76% (88)	33% (24)	63% (19)	62% (34)

³ Isolates resistant to oxacillin are interpreted as methicillin resistant.

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>		