

Equine 2013-2015

## Susceptibility profile of Equine pathogens received at ISU VDL

Data reported as: % susceptible (# isolates tested)<sup>1</sup>

Antibiotic	A equ	P aer	R equ	S aur	S equi	S equus	S zoo	Salm B
Amikacin	100% (23)	100% (10)	100% (19)	100% (20)	21% (14)	9% (22)	3% (108)	91% (11)
Ampicillin	100% (23)	0% (10)	0% (19)	35% (20)	100% (14)	100% (22)	95% (108)	55% (11)
Azithromycin	NI	NI	NI	68% (19)	92% (13)	82% (22)	97% (101)	NI
Cefazolin	100% (23)	0% (10)	0% (19)	90% (20)	93% (14)	100% (22)	97% (108)	73% (11)
Ceftazidime	96% (23)	100% (10)	0% (19)	95% (19)	100% (13)	100% (22)	98% (101)	82% (11)
Ceftiofur	96% (23)	0% (10)	0% (19)	90% (20)	93% (14)	100% (22)	96% (108)	82% (11)
Chloramphenicol	96% (23)	0% (10)	79% (19)	95% (20)	93% (14)	100% (22)	99% (108)	82% (11)
Clarithromycin	NI	NI	95% (19)	68% (19)	NI	NI	0% (101)	NI
Doxycycline	100% (23)	0% (10)	95% (19)	65% (20)	100% (14)	77% (22)	82% (108)	55% (11)
Enrofloxacin	96% (23)	70% (10)	74% (19)	75% (20)	29% (14)	77% (22)	31% (108)	100% (11)
Erythromycin	9% (23)	0% (10)	95% (19)	70% (20)	93% (14)	77% (22)	90% (108)	0% (11)
Gentamicin	100% (23)	90% (10)	100% (19)	50% (20)	36% (14)	50% (22)	7% (108)	91% (11)
Imipenem	100% (23)	100% (10)	100% (19)	85% (20)	100% (14)	100% (22)	100% (108)	100% (11)
Oxacillin <sup>3</sup>	NI	0% (10)	NI	90% (20)	NI	NI	NI	NI
Penicillin	0% (23)	0% (10)	0% (19)	30% (20)	100% (14)	95% (22)	96% (108)	0% (11)
Tetracycline	100% (23)	10% (10)	63% (19)	47% (19)	77% (13)	68% (22)	29% (101)	45% (11)
Ticarcillin	100% (23)	100% (10)	0% (19)	85% (20)	100% (14)	100% (22)	100% (108)	55% (11)
Ticarcillin/Clavulanic Acid	96% (23)	100% (10)	0% (19)	90% (20)	93% (14)	100% (22)	100% (108)	64% (11)
Trimethoprim/Sulphamethoxazole	87% (23)	0% (10)	79% (19)	70% (20)	100% (14)	100% (22)	96% (108)	91% (11)

<sup>3</sup> Isolates resistant to oxacillin are interpreted as potentially 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 In 2015 changes were incorporated into the test method.
- 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 caballi</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>		