

Porcine 2011

Susceptibility profile of Porcine pathogens received at ISU VDL in 2011

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

	APP	A suis	B bron	E coli	Erys	H ecol	HPS	Pmul A	Pmul D	Salm	Salm B ²	Salm C1 ²	S suis
Ampicillin	84% (62)	95% (252)	7% (242)	23% (388)	100% (19)	25% (1129)	99% (550)	99% (813)	98% (348)	56% (41)	33% (648)	62% (130)	98% (1230)
Ceftiofur	100% (62)	100% (252)	0% (242)	63% (388)	100% (19)	63% (1129)	100% (550)	100% (813)	100% (348)	93% (41)	83% (648)	79% (130)	100% (1230)
Chlortetracycline	69% (62)	90% (252)	99% (242)	8% (388)	16% (19)	7% (1129)	100% (550)	99% (813)	97% (348)	34% (41)	11% (648)	44% (130)	19% (1230)
Clindamycin	0% (62)	0% (252)	0% (242)	0% (388)	79% (19)	0% (1129)	5% (550)	0% (813)	1% (348)	0% (41)	0% (648)	0% (130)	23% (1230)
Enrofloxacin	100% (62)	100% (252)	96% (242)	71% (388)	100% (19)	97% (1129)	99% (550)	100% (813)	100% (348)	88% (41)	93% (648)	99% (130)	95% (1230)
Florfenicol	97% (62)	100% (252)	44% (242)	13% (388)	21% (19)	20% (1129)	100% (550)	100% (813)	100% (348)	27% (41)	10% (648)	35% (130)	99% (1230)
Gentamicin	6% (62)	100% (252)	100% (242)	68% (388)	16% (19)	67% (1129)	95% (550)	99% (813)	98% (348)	78% (41)	86% (648)	84% (130)	96% (1230)
Neomycin	8% (62)	94% (252)	96% (242)	59% (388)	5% (19)	58% (1129)	55% (550)	94% (813)	93% (348)	76% (41)	76% (648)	86% (130)	80% (1230)
Oxytetracycline	8% (62)	71% (252)	97% (242)	7% (388)	16% (19)	5% (1129)	95% (550)	24% (813)	55% (348)	37% (41)	10% (648)	45% (130)	4% (1230)
Penicillin	18% (62)	0% (252)	0% (242)	0% (388)	100% (19)	0% (1129)	22% (550)	94% (813)	95% (348)	0% (41)	0% (648)	0% (130)	86% (1230)
Spectinomycin	10% (62)	0% (252)	0% (242)	0% (388)	68% (19)	0% (1129)	61% (550)	1% (813)	0% (348)	0% (41)	0% (648)	0% (130)	8% (1230)
Sulfadimethoxine	50% (62)	92% (252)	18% (242)	22% (388)	16% (19)	21% (1129)	33% (550)	27% (813)	28% (348)	7% (41)	3% (648)	31% (130)	31% (1230)
Tiamulin	95% (62)	95% (252)	1% (242)	0% (388)	95% (19)	2% (1129)	96% (550)	73% (813)	16% (348)	0% (41)	0% (648)	0% (130)	90% (1230)
Tilmicosin	98% (62)	94% (252)	4% (242)	0% (388)	74% (19)	0% (1129)	93% (550)	95% (813)	49% (348)	0% (41)	0% (648)	0% (130)	26% (1230)
Trimethoprim/ Sulphamethoxazole	0% (62)	100% (252)	23% (242)	62% (388)	26% (19)	70% (1129)	96% (550)	0% (813)	0% (348)	93% (41)	86% (648)	89% (130)	97% (1230)
Tulathromycin	98% (62)	NI	100% (242)	NI	NI	NI	NI	100% (813)	99% (348)	NI	NI	NI	NI
Tylosin (Tartrate/Base)	2% (62)	0% (252)	0% (242)	NI	NI	0% (1129)	NI	1% (813)	1% (348)	NI	NI	NI	NI

Carbadox ⁴	E coli		Salm	
	>=2 ug/ml	<=2 ug/ml	>=2 ug/ml	<=2 ug/ml
	35% (149)	65% (272)	13% (47)	87% (304)

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).

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 1 st round of testing. This table represents additional Disk Diffusion testing for those isolates.	
NA	Not applicable	
ND	Not done	
NI	No interpretation	
A equ - Actinobacillus equuli	H ecol - hemolytic E. coli	S aur - Staphylococcus aureus
A suis - Actinobacillus suis	H som - Histophilus somni	S beta- Beta Streptococcus species
Abua - Acinetobacter species	HPS - Haemophilus parasuis	S can - Streptococcus canis
Amy - Actinomyces species	K pneu - Klebsiella pneumoniae	S chol - Salmonella choleraesuis
APP - Actinobacillus pleuropneumoniae	M bov - Moraxella bovis	S dysg - Streptococcus dysgalactiae
B bron - Bordetella bronchiseptica	M haem - Mannheimia haemolytica	S epi- Staphylococcus epidermidis
B tre - Bibersteinia trehalosi (formerly Pasteurella trehalosi)	P aer - Pseudomonas aeruginosa	S equi - Streptococcus equi
Bact - Bacteroides group	P cab - Pasteurella caballi	S equus - Streptococcus equisimilis
C diff - Clostridium difficile	P mult - Pasteurella multocida	S pint - Staph pseudintermedius
C perf - Clostridium perfringens	Past - Pasteurella species	S suis - Streptococcus suis
Clos - Clostridium species	Pec - Peptococcus species	S ube - Streptococcus uberis
E coli - Escherichia coli	Pes - Peptostreptococcus species	S zoo - Streptococcus zooepidemicus
E fael - Enterococcus faecalis	Pmul A - Pasteurella multocida Type A	Salm sp- Salmonella species
E faem - Enterococcus faecium	Pmul D - Pasteurella multocida Type D	Salm B - Salmonella species group B
Enc - Enterococcus species	Prot - Proteus species	Salm C1 - Salmonella species group C1
Ente - Enterobacter species	Prp - Propionibacterium species	Salm C2 - Salmonella species group C2
Erys - Erysipelothrix	Pseu - Pseudomonas species	Salm D - Salmonella species group D
Fus - Fusobacterium	R equ - Rhodococcus equi	Salm E - Salmonella species group E
G ana - Gallibacterium anatis		