Porcine 2014 — Susceptibility profile of Porcine pathogens received at ISU VDL

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

Antibiotic	A suis	APP	B bron	E coli	Erys	H ecol	HPS	Pmul A	Pmul D	S suis	Salm B[2]	Salm C1[2]	Salm sp
Ampicillin	96% (270)	91% (86)	6% (17)	34% (514)	94% (18)	18% (1718)	99% (575)	99% (173)	100% (86)	96% (826)	27% (637)	63% (126)	65% (212)
Ceftiofur	100% (270)	100% (86)	0% (17)	63% (514)	94% (18)	63% (1718)	99% (575)	100% (173)	100% (86)	98% (826)	79% (637)	76% (126)	78% (212)
Chlortetracycline	97% (270)	79% (86)	94% (17)	12% (513)	11% (18)	8% (1691)	100% (575)	98% (173)	97% (86)	19% (826)	8% (636)	44% (126)	46% (212)
Clindamycin	0% (270)	0% (86)	0% (17)	0% (514)	44% (18)	0% (1718)	8% (575)	0% (173)	0% (86)	18% (826)	0% (637)	0% (126)	0% (212)
Enrofloxacin	100% (270)	99% (86)	94% (17)	82% (514)	89% (18)	73% (1718)	99% (575)	99% (173)	100% (86)	95% (826)	91% (637)	91% (126)	91% (212)
Florfenicol	100% (270)	100% (86)	41% (17)	10% (513)	33% (18)	21% (1691)	100% (575)	100% (173)	100% (86)	97% (826)	22% (636)	25% (126)	26% (212)
Gentamicin	97% (270)	1% (86)	94% (17)	77% (514)	6% (18)	63% (1718)	74% (575)	99% (173)	99% (86)	94% (826)	78% (637)	76% (126)	75% (212)
Neomycin	87% (270)	2% (86)	88% (17)	77% (513)	6% (18)	65% (1691)	35% (575)	98% (173)	95% (86)	79% (826)	73% (636)	79% (126)	82% (212)
Oxytetracycline	80% (270)	6% (86)	94% (17)	11% (513)	11% (18)	7% (1691)	95% (575)	20% (173)	55% (86)	4% (826)	8% (636)	44% (126)	44% (212)
Penicillin	2% (270)	19% (86)	0% (17)	0% (514)	89% (18)	0% (1718)	31% (575)	92% (173)	93% (86)	78% (826)	0% (637)	0% (126)	0% (212)
Spectinomycin	1% (270)	2% (86)	0% (17)	1% (513)	61% (18)	3% (1691)	63% (575)	1% (173)	1% (86)	20% (826)	0% (636)	0% (126)	0% (212)
Sulfadimethoxine	94% (270)	35% (86)	12% (17)	40% (513)	0% (18)	29% (1691)	28% (575)	28% (173)	27% (86)	28% (826)	3% (636)	20% (126)	9% (212)
Tiamulin	93% (270)	95% (86)	0% (17)	0% (513)	67% (18)	1% (1691)	96% (575)	69% (173)	6% (86)	83% (826)	0% (636)	0% (126)	0% (212)
Tilmicosin	96% (270)	94% (86)	0% (17)	0% (513)	61% (18)	0% (1691)	89% (575)	86% (173)	23% (86)	23% (826)	0% (636)	0% (126)	0% (212)
Trimethoprim/ Sulphamethoxazole	100% (270)	97% (86)	12% (17)	75% (514)	50% (18)	74% (1718)	95% (575)	97% (173)	95% (86)	97% (826)	85% (637)	81% (126)	86% (212)
Tulathromycin	NI	88% (86)	100% (17)	NI	NI	NI	NI	98% (173)	98% (86)	NI	NI	NI	NI
Tylosin (Tartrate/Base)	0% (270)	0% (86)	0% (17)	NI	NI	NI	NI	2% (173)	0% (86)	NI	NI	NI	NI

Carbadox[4]	E coli		Salm	
	>2 ug/ml	<= 2 ug/ml	>2 ug/ml	<= 2 ug/ml
	21% (1,158)	79%(1,158)	11%(408)	89%(408)

[2] See Salmonella serotype table for most common serotypes isolated within each group

[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 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 - 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 equs - 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		