

**Porcine 2009**

Susceptibility profile of Porcine pathogens received at ISU VDL in 2009

	<b>A suis</b>	<b>APP</b>	<b>B bron</b>	<b>E coli</b>	<b>Erys</b>	<b>H ecol</b>	<b>HPS</b>	<b>Pmul A</b>	<b>Pmul D</b>	<b>S chol</b>	<b>S suis</b>	<b>Salm B</b>	<b>Salm E</b>
<i>Number of isolates*</i>	256	128	34	570	35	986	410	611	302	42	908	459	64
<i>Data reported as % susceptible</i>													
Ampicillin	96%	75%	21%	29%	97%	25%	99%	99%	98%	40%	99%	29%	55%
Ceftiofur	100%	96%	0%	58%	100%	61%	100%	100%	100%	98%	99%	76%	67%
Chlortetracycline	95%	70%	100%	6%	11%	6%	99%	98%	97%	24%	17%	7%	25%
Clindamycin	0%	2%	0%	0%	63%	0%	2%	0%	0%	0%	25%	0%	0%
Danofloxacin	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Enrofloxacin	100%	98%	91%	91%	97%	99%	100%	100%	100%	100%	97%	97%	98%
Florfenicol	100%	98%	76%	11%	34%	20%	100%	100%	100%	100%	98%	3%	9%
Gentamicin	94%	3%	100%	68%	9%	62%	85%	97%	99%	100%	96%	79%	72%
Neomycin	86%	2%	94%	63%	3%	58%	54%	97%	96%	100	64%	70%	67%
Oxytetracycline	64%	11%	97%	6%	11%	4%	94%	80%	58%	24%	6%	7%	25%
Penicillin	2%	13%	0%	0%	97%	0%	31%	87%	91%	0%	88%	0%	0%
Spectinomycin	0%	2%	0%	0%	83%	0%	33%	1%	0%	0%	5%	0%	0%
Sulfadimethoxine	95%	45%	12%	26%	9%	19%	39%	44%	42%	21%	38%	5%	2%
Tiamulin	86%	95%	0%	0%	71%	1%	96%	73%	20%	0%	92%	0%	0%
Tilmicosin	94%	74%	6%	0%	80%	0%	88%	87%	29%	0%	27%	0%	0%
Trimethoprim / Sulphamethoxazole	100%	0%	50%	72%	57%	74%	95%	57%	0%	100%	99%	81%	84%
Tulathromycin	0%	26%	38%	0%	0%	0%	0%	36%	31%	0%	0%	0%	0%
Tylosin (Tartrate/Base)	0%	2%	0%	0%	0%	0%	0%	1%	0% (302)	0%	0%	0%	0%

**E coli**

**Salm**

*Number of isolates\**

117

73

<=2 ug/ml >2 ug/ml

<=2 ug/ml >2ug/ml

Carabadox\*\*\*\*

67% 32%

81% 19%

\*\*\*\*A results of ≤2µg/ml for Carabadox 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 $\leq 2$ 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 <sup>st</sup> 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		