Antimicrobial Susceptibility Profiles

Note: The susceptibility information presented below is a summary of data gathered at ISU VDL for the time period listed. The information may be useful to understand susceptibility trends or as aid in making clinical decisions, but may not be accurate for specific disease situations.

Avian 2007-2009 Susceptibility profile of Avian pathogens received at ISU VDL in 2007-2009

	E coli	G ana	P mult	Salm	Salm B	Salm C1
*Number of isolates**	200	4	8	19	22	12
Data reported as % susceptible						
Amoxicillin	66%	75%	100%	68%	82%	92%
Ceftiofur	95%	100%	100%	95%	91%	92%
Clindamycin	0%	0%	0%	0%	0%	0%
Enrofloxacin	98%	100%	100%	100%	100%	100%
Erythromycin	0%	0%	0%	0%	0%	0%
Florfenicol	34%	100%	100%	42%	59%	25%
Gentamicin	76%	100%	100%	68%	82%	92%
Neomycin	83%	50%	100%	95%	95%	100%
Novobiocin	0%	0%	88%	0%	0%	0%
Oxytetracycline	28%	0%	75%	58%	64%	75%
Penicillin	0%	0%	75%	0%	0%	0%
Spectinomycin	1%	0%	0%	0%	0%	0%
Streptomycin	51%	100%	38%	42%	32%	83%
Sulfadimethoxine	42%	0%	13%	37%	32%	67%
Sulphathiazole	51%	0%	38%	68%	50%	83%
Tetracycline	28%	0%	75%	58%	64%	75%
Trimethoprim/Sulphamethoxazole	93%	100%	88%	100%	100%	100%
Tylosin (Tartrate/Base)	0%	0%	0%	0%	0%	0%

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		