

Table 5a. Distribution of MICs and Occurrence of Resistance by Top *Enterococcus* Species Tested from Chickens, 2005 (n=1497)

Antimicrobial	Species (# of Isolates)	%I ¹	%R ²	95% CI ³	Distribution (% of MICs (µg/ml) ⁴)																	
					0.015	0.03	0.06	0.125	0.25	0.50	1	2	4	8	16	32	64	128	256	512	1024	2048
Aminoglycosides																						
Gentamicin	faecalis (865)	N/A	20.8	18.2-23.7													77.3	1.8	1.5	2.5	16.8	
	faecium (312)	N/A	14.1	10.5-18.6													85.3	0.6	2.2	4.5	7.4	
	durans (94)	N/A	3.2	0.8-9.7													95.7	1.1	2.1		1.1	
	hirae (84)	N/A	8.3	3.7-16.9													91.7			4.8	3.6	
	gallinarum (46)	N/A	32.6	20.0-48.1													63.0	4.3	6.5	13.0	13.0	
	casseliflavus (44)	N/A	38.6	24.7-54.5													54.5	6.8	2.3	4.5	31.8	
	avium (36)	N/A	27.8	14.8-45.5													66.7	5.6	2.8	13.9	11.1	
	species (10)	N/A	30.0	8.1-64.6													72.7		18.2		9.1	
	malodoratus (2)	N/A	0.0	0.0-80.2													100.0					
	mundtii (2)	N/A	0.0	0.0-80.2													100.0					
	sulfureus (1)	N/A	0.0	0.0-94.5													100.0					
	cecorum (1)	N/A	0.0	0.0-94.5													100.0					
	Kanamycin	faecalis (865)	N/A	32.9	28.8-36.2													65.9	0.6	0.6	0.2	32.7
		faecium (312)	N/A	19.9	15.7-24.9													34.0	34.6	11.5	2.6	17.3
		durans (94)	N/A	7.4	3.3-15.2													91.5	1.1		3.2	4.3
		hirae (84)	N/A	23.8	15.5-34.6													76.2			1.2	22.6
gallinarum (46)		N/A	47.8	33.1-62.9													50.0	2.2		2.2	45.7	
casseliflavus (44)		N/A	70.5	54.7-82.9													29.5			2.3	68.2	
avium (36)		N/A	58.3	40.9-74.0													41.7			5.6	52.8	
species (10)		N/A	30.0	8.1-64.6													72.7			9.1	18.2	
malodoratus (2)		N/A	0.0	0.0-80.2													100.0					
mundtii (2)		N/A	0.0	0.0-80.2													100.0					
sulfureus (1)		N/A	0.0	0.0-94.5													100.0					
cecorum (1)		N/A	100.0	5.5-100																100.0		
Streptomycin		faecalis (865)	N/A	21.5	18.8-24.4													78.5	3.2	3.2	15.0	
		faecium (312)	N/A	19.9	15.7-24.9													80.1	13.8	4.2	1.9	
		durans (94)	N/A	4.3	1.4-11.2													95.7	1.1	2.1	1.1	
		hirae (84)	N/A	27.4	18.5-38.4													72.6	1.2	11.9	14.3	
	gallinarum (46)	N/A	47.8	33.1-62.9													52.2	15.2	26.1	6.5		
	casseliflavus (44)	N/A	25.0	13.7-40.6													75.0			6.8	18.2	
	avium (36)	N/A	2.8	0.1-16.2													97.2			2.8		
	species (10)	N/A	10.0	0.5-45.9													90.9			9.1		
	malodoratus (2)	N/A	0.0	0.0-80.2													100.0					
	mundtii (2)	N/A	0.0	0.0-80.2													100.0					
	sulfureus (1)	N/A	0.0	0.0-94.5													100.0					
	cecorum (1)	N/A	0.0	0.0-94.5													100.0					
	Glycopeptide																					
	Vancomycin	faecalis (865)	0.1	0.0	0.0-0.6	1.5	69.5	28.3	0.6	0.1												
		faecium (312)	0.0	0.0	0.0-1.5	78.2	14.4	7.4														
		durans (94)	0.0	0.0	0.0-4.9	94.7	5.3															
hirae (84)		0.0	0.0	0.0-5.4	73.8	25.0	1.2															
gallinarum (46)		56.5	0.0	0.0-9.6	2.2	2.2	2.2	37.0	56.5													
casseliflavus (44)		6.8	0.0	0.0-10.0	13.6	61.4	6.8	11.4	6.8													
avium (36)		0.0	0.0	0.0-12.0	91.7	8.3																
species (10)		20.0	0.0	0.0-34.5	36.4	27.3	18.2		18.2													
malodoratus (2)		0.0	0.0	0.0-80.2	100.0																	
mundtii (2)		0.0	0.0	0.0-80.2	100.0																	
sulfureus (1)		0.0	0.0	0.0-94.5	100.0																	
cecorum (1)		0.0	0.0	0.0-94.5	100.0																	

¹ Percent of isolates with intermediate susceptibility

² Percent of isolates that were resistant

³ 95% confidence intervals for percent resistant (%R) were calculated using the Clopper-Pearson exact method

⁴ The unshaded areas indicate the range of dilutions tested for each antimicrobial. Single vertical bars indicate the breakpoints for susceptibility, while double vertical bars indicate the breakpoints for resistance. Numbers in the shaded area indicate the percentages of isolates with MICs greater than the highest tested concentrations. Numbers listed for the lowest tested concentrations represent the percentages of isolates with MICs equal to or less than the lowest tested concentration. CLSI breakpoints were used when available. There are no CLSI breakpoints for streptomycin.

Table 5c. Distribution of MICs and Occurrence of Resistance by Top *Enterococcus* Species Tested from Chickens, 2005 (n=14497)

Antimicrobial	Species (# of Isolates)	%I ¹	%R ²	95% CI ³	Distribution (% of MICs (µg/ml)) ⁴															
					0.015	0.03	0.06	0.125	0.25	0.50	1	2	4	8	16	32	64	128	256	512
Nitrofurantoin	faecalis (865)	2.3	0.8	0.3-1.7									0.2	2.2	58.8	33.5	2.1	2.3	0.8	
	faecium (312)	41.7	53.5	47.8-59.1									0.6				4.2	41.7	53.5	
	durans (94)	20.2	74.5	64.3-82.7										1.1	2.1	2.1	20.2	74.5		
	hirae (84)	26.2	8.3	3.7-16.9											3.6	61.9	26.2	8.3		
	gallinarum (46)	2.2	0.0	0.0-9.6									30.4	58.7	6.5	2.2	2.2			
	casseliflavus (44)	0.0	0.0	0.0-10.0									2.3	2.3	27.3	59.1	9.1			
	avium (36)	11.1	2.8	0.1-16.2											11.1	50.0	25.0	11.1	2.8	
	species (10)	0.0	10.0	0.5-45.9									9.1	18.2	36.4	27.3			9.1	
	malodoratus (2)	0.0	0.0	0.0-80.2										50.0	50.0					
	mundtii (2)	0.0	0.0	0.0-80.2													50.0			
	sulfureus (1)	0.0	0.0	0.0-94.5																
	cecorum (1)	0.0	0.0	0.0-94.5										100.0						
	Oxazolidinone	Linezolid																		
		faecalis (865)	0.1	0.0	0.0-0.6								1.7	51.7	46.5	0.1				
faecium (312)		0.0	0.0	0.0-1.5									47.4	52.6						
durans (94)		0.0	0.0	0.0-4.9								21.3	69.1	9.6						
hirae (84)		0.0	0.0	0.0-5.4									3.6	42.9	53.6					
gallinarum (46)		0.0	0.0	0.0-9.6									8.7	67.4	23.9					
casseliflavus (44)		0.0	0.0	0.0-10.0										70.5	29.5					
avium (36)		0.0	0.0	0.0-12.0									11.1	88.9						
species (10)		0.0	0.0	0.0-34.5										18.2	63.6	18.2				
malodoratus (2)		0.0	0.0	0.0-80.2										50.0	50.0					
mundtii (2)		0.0	0.0	0.0-80.2												100.0				
sulfureus (1)		0.0	0.0	0.0-94.5																
cecorum (1)		0.0	0.0	0.0-94.5										100.0						
Penicillin		Penicillin																		
	faecalis (865)	N/A	0.3	0.1-1.0									0.3	1.3	40.2	57.6	0.2	0.3		
	faecium (312)	N/A	30.4	25.4-35.9									13.5	5.4	14.4	21.2	15.1	23.7	6.7	
	durans (94)	N/A	1.1	0.1-6.7									38.3	8.5	16.0	33.0	3.2		1.1	
	hirae (84)	N/A	4.8	1.6-12.5									31.0	42.9	16.7	3.6	1.2		4.8	
	gallinarum (46)	N/A	2.2	0.1-13.0									26.1	26.1	8.7	19.6	17.4	2.2		
	casseliflavus (44)	N/A	0.0	0.0-10.0									81.8	18.2						
	avium (36)	N/A	0.0	0.0-12.0									5.6	55.6	38.9					
	species (10)	N/A	0.0	0.0-34.5									72.7	9.1	9.1	9.1				
	malodoratus (2)	N/A	0.0	0.0-80.2													100.0			
	mundtii (2)	N/A	0.0	0.0-80.2													100.0			
	sulfureus (1)	N/A	0.0	0.0-94.5																
	cecorum (1)	N/A	0.0	0.0-94.5										100.0						
	Phenicol	Chloramphenicol																		
faecalis (865)		0.2	0.1	0.0-0.7									0.9	36.5	62.2	0.2			0.1	
faecium (312)		0.0	0.0	0.0-1.5									1.9	73.4	24.7					
durans (94)		0.0	0.0	0.0-4.9									10.6	62.8	26.6					
hirae (84)		0.0	0.0	0.0-5.4									3.6	72.6	23.8					
gallinarum (46)		0.0	4.3	0.7-16.0									6.5	78.3	10.9				4.3	
casseliflavus (44)		0.0	0.0	0.0-10.0										75.0	25.0					
avium (36)		0.0	0.0	0.0-12.0									8.3	91.7						
species (10)		0.0	0.0	0.0-34.5									9.1	63.6	27.3					
malodoratus (2)		0.0	0.0	0.0-80.2										50.0	50.0					
mundtii (2)		0.0	0.0	0.0-80.2											50.0	50.0				
sulfureus (1)		0.0	0.0	0.0-94.5																
cecorum (1)		100.0	0.0	0.0-94.5													100.0			

¹ Percent of isolates with intermediate susceptibility

² Percent of isolates that were resistant

³ 95% confidence intervals for percent resistant (%R) were calculated using the Clopper-Pearson exact method

⁴ The unshaded areas indicate the range of dilutions tested for each antimicrobial. Single vertical bars indicate the breakpoints for susceptibility, while double vertical bars indicate the breakpoints for resistance. Numbers in the shaded area indicate the percentages of isolates with MICs greater than the highest tested concentrations. Numbers listed for the lowest tested concentrations represent the percentages of isolates with MICs equal to or less than the lowest tested concentration. CLSI breakpoints were used when available. There are no CLSI breakpoints for streptomycin.

