



State of Louisiana
Department of Health and Hospitals
Center for Community and Preventive Health

Louisiana Animal Disease Diagnostic Laboratory and LSU SVM Veterinary Teaching Hospital and Clinics Staff:

The LOUISIANA OFFICE OF PUBLIC HEALTH (OPH)/LOUISIANA ANIMAL DISEASE DIAGNOSTIC LABORATORY (LADDL) ANTIMICROBIAL RESISTANCE SURVEILLANCE SYSTEM (LARSS) RESULTS (Dogs): 2004 to 2012.

The LARSS System is a joint project of OPH and LADDL. LADDL submits quarterly summaries of cultures and sensitivities of microbial isolates to the Infectious Disease Epidemiology Section at OPH. This is a summary of the system's results on isolates from canine species submitted from 2004 to third quarter 2012.

The table (Table 1) on the ensuing page provides a summary of information. The table lists the percentages of isolates susceptible to specific antimicrobials and those organism/antimicrobial combinations in which significantly different levels of susceptibility were reported from isolates received from the veterinary teaching hospital and clinic at Louisiana State University and isolates submitted from private practices around the state. Percent susceptible annotated with "t" in the table, indicates that increases in resistance have occurred and the percent susceptible listed in the table is based on recent activity, not the ratio of susceptible isolates for the duration of the study.

Figures illustrating resistance development in those organism/antimicrobial combinations in which statistically significant trends in resistance were identified can be provided upon request.

Inquiries concerning this report should be addressed to Dr. Gary Balsamo, State Public Health Veterinarian, at gary.balsamo@la.gov.

Att: Table

Table: Percent susceptible to antimicrobials – canine - Louisiana - January, 2004 - September, 2012

In cells that display two percentages, the first percentage is applicable to the veterinary teaching hospital and clinic, while the second percentage reflects the susceptibility solely in samples submitted from private practices.

Species/ Antimicrobial	<i>Corynebacterium</i> spp	<i>E. coli</i>	<i>Enterobacter</i> spp	<i>Enterococcus</i> spp	<i>Klebsiella</i> spp	<i>Pasteurella</i> spp	<i>Proteus</i> spp	<i>Pseudomonas aeruginosa</i>	<i>Staphylococcus pseudintermedius</i>	<i>Streptococcus</i> spp
Canine Species										
Gentamicin	88.9	87.8	83.3t	69.6**	91.6	97.3	96.2	89.2	61.6t/84.6t	88.5**
Neomycin	98.5	93.8	96.3	57.5**	96.8	90.9t	96.3	69.9/52.0	68.6t/88.9t	R**
Tobramycin	71.4	88.0	90.7	Rt**	92.2	94.9	97.4	96.3	73.9t/84.1t	Rt
Clarithromycin	69.8	R	R	66.3	R	89.4	R	R	Rt/76.9t	90.3
Azithromycin	NE	70.6	NE	NE	NE	NE	NE	NE	NE	NE
Cefotaxime	62.5	86.3t	91.5	R	96.8	98.3	97.6	54.6	99.7	96.9
Cefovecin	50.0t	69.4/84.5	81.8	R	83.3	98.0	92.6	R	96.5t	95.2
Cefpodoxime	R	67.5/85.4	76.5	R	83.1	97.4	93.5	R	97.7t	95.5
Ceftazidime	R	80.5/92.1	91.8	R	92.3	92.1	97.5	98.2	NE	83.4
Ceftiofur	NE	72.0	NE	NE	NE	NE	NE	NE	NE	NE
Cephalothin	73.9	R/55.3	R	R	73.5	91.5	82.3	R	100.0	91.9
Ciprofloxacin	54.0	71.8/80.1	92.2	60.5	86.2/100.0	97.1	98.7	87.5	73.7/87.7	87.1
Enrofloxacin	53.2	70.9/81.1	88.4	R	85.0/96.8	95.7	95.7	R	71.8/87.9	79.3
Marbofloxacin	53.0	70.0/80.0	91.3	67.5	83.3/98.0	90.0	97.6	80.0	71.8/87.0	90.7
Clindamycin	Rt	R	R	R	R	R	R	R	Rt/79.3	84.2
Ampicillin	50.0	R/56.5	R	75.2/89.3	R	91.3	83.7	R	R	95.1
Oxacillin	R	R	R	R	R	R	R	R	65.2/74.4t	65.4/74.2
Amoxicillin/clavulanate	75.9t	65.5t/80.4	R	77.9/93.0	77.2	98.3	90.4	R	100.0	96.3/99.2
Sulfa/trimethoprim	53.0	76.0/82.0	87.3	R/67.3	85.8	93.8	86.9	R	Rt/60.5t	79.8
Sulfonamides	60.0	69.9	83.7	R	79.9	83.6	74.0	R	Rt/51.3t	R
Tetracycline	93.4	75.9	81.3	R	85.2	97.2	R	R	Rt/73.7	R
Chloramphenicol	89.8	86.0/91.9	87.4	83.2	89.6	96.7	56.4	R	98.7	94.7
Tazobactam	NE	87.5	NE	NE	NE	NE	NE	100.0	NE	NE
Polymyxin B	71.4	97.9	98.0/81.1	R	98.4	94.9	R	98.0	91.8t	R

NE..Not evaluated due to insufficient numbers

R..Less than 50% susceptible

*. indicates the number of samples available for analysis were <20

**.. Streptococci are intrinsically resistant to aminoglycosides. In vitro C & S results should be ignored.

t. indicates trend of increasing resistance discovered, therefore the percent susceptible is determined since the onset of increasing resistance.

Antimicrobial/organism combinations with > 90% susceptibility are highlighted in green.

Infectious Disease Epidemiology Section
Suite 2155, 1450 Poydras Street 70112 P.O. Box 60630 New Orleans, Louisiana 70161
Phone # 504-568-8313 Fax # 504-568-8290 www.dhh.louisiana.gov
"AN EQUAL OPPORTUNITY EMPLOYER"