### 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 an aid in making clinical decisions, but may not be accurate for specific disease situations.
- In vitro antimicrobial test results do not represent therapeutic recommendations from the VDL or personnel therein. Extra/Off label usage of an antimicrobial which is limited/prohibited for certain species may result in legal action by FDA-CVM.
- Data is reported as: % susceptible (# isolates tested) – not all bacteria isolated at ISU VDL have been tested for antimicrobial susceptibility.

## Canine 2017-2019

### Susceptibility profile of Canine pathogens received at ISU VDL in 2017-2019

Data reported as: % susceptible (# isolates tested)

<table>
<thead>
<tr>
<th>Antibiotic</th>
<th>B bron</th>
<th>E coli</th>
<th>E fae</th>
<th>E faem</th>
<th>Ente</th>
<th>K pneu</th>
<th>P aer</th>
<th>P mult</th>
<th>Pseu</th>
<th>S aur</th>
<th>S can</th>
<th>S pint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amikacin</td>
<td>100% (32)</td>
<td>100% (923)</td>
<td>5% (251)</td>
<td>19% (112)</td>
<td>99% (82)</td>
<td>100% (7)</td>
<td>97% (382)</td>
<td>100% (11)</td>
<td>89% (76)</td>
<td>100% (55)</td>
<td>4% (362)</td>
<td>99% (1270)</td>
</tr>
<tr>
<td>Amoxicillin/Clavulanic Acid</td>
<td>97% (32)</td>
<td>43% (919)</td>
<td>99% (249)</td>
<td>32% (111)</td>
<td>15% (78)</td>
<td>100% (7)</td>
<td>2% (357)</td>
<td>100% (11)</td>
<td>32% (69)</td>
<td>42% (55)</td>
<td>100% (331)</td>
<td>66% (1195)</td>
</tr>
<tr>
<td>Ampicillin</td>
<td>3% (32)</td>
<td>35% (919)</td>
<td>99% (249)</td>
<td>31% (111)</td>
<td>15% (78)</td>
<td>0% (7)</td>
<td>0% (357)</td>
<td>100% (11)</td>
<td>12% (69)</td>
<td>20% (55)</td>
<td>98% (331)</td>
<td>51% (1195)</td>
</tr>
<tr>
<td>Cefazolin</td>
<td>0% (32)</td>
<td>67% (923)</td>
<td>0% (251)</td>
<td>2% (112)</td>
<td>5% (82)</td>
<td>100% (7)</td>
<td>1% (382)</td>
<td>100% (11)</td>
<td>12% (76)</td>
<td>71% (55)</td>
<td>90% (362)</td>
<td>62% (1270)</td>
</tr>
<tr>
<td>Cefovecin</td>
<td>0% (32)</td>
<td>42% (918)</td>
<td>0% (249)</td>
<td>1% (111)</td>
<td>37% (78)</td>
<td>71% (7)</td>
<td>0% (357)</td>
<td>73% (11)</td>
<td>9% (69)</td>
<td>25% (55)</td>
<td>63% (331)</td>
<td>35% (1195)</td>
</tr>
<tr>
<td>Cefpodoxime</td>
<td>0% (32)</td>
<td>80% (918)</td>
<td>0% (249)</td>
<td>0% (111)</td>
<td>69% (78)</td>
<td>100% (7)</td>
<td>0% (357)</td>
<td>100% (11)</td>
<td>9% (69)</td>
<td>20% (55)</td>
<td>97% (331)</td>
<td>37% (1195)</td>
</tr>
<tr>
<td>Cephalexin</td>
<td>0% (1)</td>
<td>0% (6)</td>
<td>3% (246)</td>
<td>2% (111)</td>
<td>NT</td>
<td>0% (2)</td>
<td>NT</td>
<td>NT</td>
<td>75% (55)</td>
<td>99% (325)</td>
<td>67% (1186)</td>
<td></td>
</tr>
<tr>
<td>Chloramphenicol</td>
<td>94% (32)</td>
<td>83% (924)</td>
<td>95% (251)</td>
<td>87% (112)</td>
<td>83% (82)</td>
<td>100% (7)</td>
<td>2% (382)</td>
<td>100% (11)</td>
<td>36% (76)</td>
<td>84% (55)</td>
<td>11% (362)</td>
<td>83% (1270)</td>
</tr>
<tr>
<td>Clindamycin</td>
<td>0% (1)</td>
<td>0% (248)</td>
<td>22% (111)</td>
<td>NT</td>
<td>0% (2)</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>93% (55)</td>
<td>90% (331)</td>
<td>64% (1194)</td>
<td></td>
</tr>
<tr>
<td>Doxycycline</td>
<td>97% (32)</td>
<td>80% (923)</td>
<td>70% (251)</td>
<td>23% (112)</td>
<td>87% (82)</td>
<td>100% (7)</td>
<td>13% (382)</td>
<td>100% (11)</td>
<td>87% (76)</td>
<td>85% (55)</td>
<td>43% (362)</td>
<td>52% (1270)</td>
</tr>
<tr>
<td>Enrofloxacin</td>
<td>91% (32)</td>
<td>83% (918)</td>
<td>6% (249)</td>
<td>0% (111)</td>
<td>81% (78)</td>
<td>100% (7)</td>
<td>35% (357)</td>
<td>100% (11)</td>
<td>48% (69)</td>
<td>75% (55)</td>
<td>30% (331)</td>
<td>64% (1195)</td>
</tr>
<tr>
<td>Erythromycin</td>
<td>0% (1)</td>
<td>9% (11)</td>
<td>37% (250)</td>
<td>5% (112)</td>
<td>0% (4)</td>
<td>NT</td>
<td>0% (27)</td>
<td>NT</td>
<td>0% (7)</td>
<td>53% (55)</td>
<td>79% (362)</td>
<td>63% (1269)</td>
</tr>
<tr>
<td>Gentamicin</td>
<td>75% (32)</td>
<td>91% (923)</td>
<td>8% (251)</td>
<td>25% (112)</td>
<td>88% (82)</td>
<td>100% (7)</td>
<td>82% (382)</td>
<td>100% (11)</td>
<td>88% (76)</td>
<td>100% (55)</td>
<td>43% (362)</td>
<td>68% (1270)</td>
</tr>
<tr>
<td>Imipenem</td>
<td>100% (32)</td>
<td>100% (919)</td>
<td>76% (249)</td>
<td>5% (111)</td>
<td>99% (78)</td>
<td>100% (7)</td>
<td>62% (357)</td>
<td>100% (11)</td>
<td>68% (69)</td>
<td>73% (55)</td>
<td>99% (331)</td>
<td>66% (1195)</td>
</tr>
<tr>
<td>Marbofloxacin</td>
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<td>83% (918)</td>
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<td>3% (111)</td>
<td>83% (78)</td>
<td>100% (7)</td>
<td>74% (357)</td>
<td>100% (11)</td>
<td>88% (69)</td>
<td>80% (55)</td>
<td>50% (331)</td>
<td>70% (1195)</td>
</tr>
<tr>
<td>Oxcillin</td>
<td>NI</td>
<td>NT</td>
<td>NI</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>NI</td>
<td>66% (1194)</td>
</tr>
<tr>
<td>Penicillin</td>
<td>0% (1)</td>
<td>NT</td>
<td>98% (248)</td>
<td>27% (111)</td>
<td>NT</td>
<td>NT</td>
<td>0% (2)</td>
<td>NT</td>
<td>NT</td>
<td>15% (55)</td>
<td>94% (331)</td>
<td>29% (1194)</td>
</tr>
<tr>
<td>Tetracycline^</td>
<td>0% (32)</td>
<td>79% (919)</td>
<td>70% (245)</td>
<td>23% (111)</td>
<td>91% (78)</td>
<td>100% (7)</td>
<td>0% (357)</td>
<td>0% (11)</td>
<td>1% (69)</td>
<td>84% (55)</td>
<td>5% (332)</td>
<td>52% (1180)</td>
</tr>
<tr>
<td>Trimethoprim/Sulphamethoxazole</td>
<td>69% (32)</td>
<td>87% (923)</td>
<td>21% (251)</td>
<td>19% (112)</td>
<td>91% (82)</td>
<td>100% (7)</td>
<td>2% (382)</td>
<td>100% (11)</td>
<td>53% (76)</td>
<td>96% (55)</td>
<td>16% (362)</td>
<td>66% (1270)</td>
</tr>
</tbody>
</table>

*Isolates resistant to oxacillin are interpreted as potentially methicillin resistant.

^In Aug of 2018 a new test, Tetracycline was added.

NI = Not Interpretable
NT = Not Tested
Key:

A equ  Actinobacillus equuli
A suis  Actinobacillus suis
APP   Actinobacillus pleuropneumoniae
B bron  Bordetella bronchiseptica
B tre   Bibersteinia trehalosi
        (formerly Pasteurella trehalosi)
C per   Clostridium perfringens
Clos   Clostridium species
E coli  Escherichia coli
E fael  Enterococcus faecalis
E faem  Enterococcus faecium
Ente   Enterobacter species
Erys   Erysipelothrix
H ecol  Hemolytic E.coli
H som   Histophilus somni
G ana   Gallibacterium anatis
GPS    Glaesserella parasuis
        (formerly Haemophilus parasuis)
K pneu  Klebsiella pneumoniae
M bov   Moraxella bovis
M bovo  Moraxella bovoculi
M haem  Mannheimia haemolytica
P aer   Pseudomonas aeruginosa
Past   Pasteurella species
PMul A  Pasteurella multocida group A
PMul D  Pasteurella multocida group D
Pseu   Pseudomonas species
R equ   Rhodococcus equi
S aur   Staphylococcus aureus
S can   Streptococcus canis
S equs  Streptococcus equisimilis
S hyi   Staphylococcus hyicus
S pint  Staphylococcus pseudintermedius
S suis  Streptococcus suis
S zoo   Streptococcus zooepidemicus
Salm B  Salmonella species group B
Salm C1  Salmonella species group C1
Salm C2  Salmonella species group C2
Salm D  Salmonella species group D
Salm sp  Salmonella species