**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)

| Antibiotic | B bron | E coli | E fael | E faem | Ente | K pneu | P aer | P mult | Pseu | S aur | S can | S pint |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Amikacin | 100% (32) | 100% (923) | 5% (251) | 19% (112) | 99% (82) | 100% (7) | 97% (382) | 100% (11) | 89% (76) | 100% (55) | 4% (362) | 99% (1270) |
| Amoxicillin/ Clavulanic Acid | 97% (32) | 43% (919) | 99% (249) | 32% (111) | 15% (78) | 100% (7) | 2% (357) | 100% (11) | 32% (69) | 42% (55) | 100% (331) | 66% (1195) |
| Ampicillin | 3% (32) | 35% (919) | 99% (249) | 31% (111) | 15% (78) | 0% (7) | 0% (357) | 100% (11) | 12% (69) | 20% (55) | 98% (331) | 51% (1195) |
| Cefazolin | 0% (32) | 67% (923) | 0% (251) | 2% (112) | 5% (82) | 100% (7) | 1% (382) | 100% (11) | 12% (76) | 71% (55) | 90% (362) | 62% (1270) |
| Cefovecin | 0% (32) | 42% (918) | 0% (249) | 1% (111) | 37% (78) | 71% (7) | 0% (357) | 73% (11) | 9% (69) | 25% (55) | 63% (331) | 35% (1195) |
| Cefpodoxime | 0% (32) | 80% (918) | 0% (249) | 0% (111) | 69% (78) | 100% (7) | 0% (357) | 100% (11) | 9% (69) | 20% (55) | 97% (331) | 37% (1195) |
| Cephalothin | 0% (1) | 0% (6) | 3% (246) | 2% (111) | NT | NT | 0% (2) | NT | NT | 75% (55) | 99% (325) | 67% (1186) |
| Chloramphenicol | 94% (32) | 83% (924) | 95% (251) | 87% (112) | 83% (82) | 100% (7) | 2% (382) | 100% (11) | 36% (76) | 84% (55) | 11% (362) | 83% (1270) |
| Clindamycin | 0% (1) | NT | 2% (248) | 22% (111) | NT | NT | 0% (2) | NT | NT | 93% (55) | 90% (331) | 64% (1194) |
| Doxycycline | 97% (32) | 80% (923) | 70% (251) | 23% (112) | 87% (82) | 100% (7) | 13% (382) | 100% (11) | 87% (76) | 85% (55) | 43% (362) | 52% (1270) |
| Enrofloxacin | 91% (32) | 83% (918) | 6% (249) | 0% (111) | 81% (78) | 100% (7) | 35% (357) | 100% (11) | 48% (69) | 75% (55) | 30% (331) | 64% (1195) |
| Erythromycin | 0% (1) | 9% (11) | 37% (250) | 5% (112) | 0% (4) | NT | 0% (27) | NT | 0% (7) | 53% (55) | 79% (362) | 63% (1269) |
| Gentamicin | 75% (32) | 91% (923) | 8% (251) | 25% (112) | 88% (82) | 100% (7) | 82% (382) | 100% (11) | 88% (76) | 100% (55) | 43% (362) | 68% (1270) |
| Imipenem | 100% (32) | 100% (919) | 76% (249) | 5% (111) | 99% (78) | 100% (7) | 62% (357) | 100% (11) | 68% (69) | 73% (55) | 99% (331) | 66% (1195) |
| Marbofloxacin | 94% (32) | 83% (918) | 8% (249) | 3% (111) | 83% (78) | 100% (7) | 74% (357) | 100% (11) | 88% (69) | 80% (55) | 50% (331) | 70% (1195) |
| Oxacillin | NI | NT | NI | NI | NT | NT | NI | NT | NT | 73% (55) | NI | 66% (1194) |
| Penicillin | 0% (1) | NT | 98% (248) | 27% (111) | NT | NT | 0% (2) | NT | NT | 15% (55) | 94% (331) | 29% (1194) |
| Tetracycline^ | 0% (32) | 79% (919) | 70% (245) | 23% (111) | 91% (78) | 100% (7) | 0% (357) | 0% (11) | 1% (69) | 84% (55) | 5% (323) | 52% (1180) |
| Trimethoprim/ Sulphamethoxazole | 69% (32) | 87% (923) | 21% (251) | 19% (112) | 91% (82) | 100% (7) | 2% (382) | 100% (11) | 53% (76) | 96% (55) | 16% (362) | 66% (1270) |

*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:

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