



PART[®]

PIPESTONE ANTIBIOTIC
RESISTANCE TRACKER

Tracking
Antibiotic
Resistance



Demonstrating
Responsible
Antibiotic Use

www.PipestonePART.com

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WHO IS PIPESTONE®



- 40 Veterinarians
- 6 Veterinary Clinics
- Pig/farmer focused
- Veterinary Service & Farm Management
- 75 Sow farms/250,000 sows
- 1,200+ employees
- 1,000+ U.S. farmer customers
- Asia and Latin America presence



History & Objectives

- Launched Jan 1, 2017
- Interactive, web-based tool
- Works to track resistance over time
- Demonstrates responsible use
- Tracks and benchmarks antibiotic use by farm
- Platform to inform the conversation on antibiotic resistance and antibiotic use
- Pipestone funded
- Research Activities
- Outreach Activities

Current Statistics

- Participants: 154 producers
- Weaned pigs: 5+ million
- Market Hogs: 3+ million
- 800 Sites
- 24 Veterinarians working with PART clients
- 270 Veterinary Visits and 1,078 Quarterly Reviews



Antibiotic Resistance Tracking: Current Focus

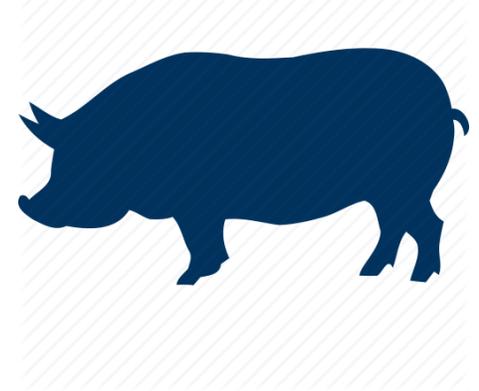
Human Health 



Food Safety 



Livestock Farms 



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Veterinary-Based



Samples
Collected and
Sent to
Diagnostic lab

Antimicrobial	E.COHL	S.SC1
	*Int/MIC	*Int/MIC
Ampicillin	S / 4.0000	S / 1.0000
Ceftiofur	S / 0.5000	S / 1.0000
Chlortetracycline	R / >8.0000	S / 1.0000
Clindamycin	R / >16.0000	R / >16.0000
Danofloxacin	NI / <=0.1200	NI / <=0.1200
Enrofloxacin	S / <=0.1200	S / <=0.1200
Florfenicol	S / 2.0000	I / 4.0000
Gentamicin	S / <=1.0000	S / <=1.0000
Neomycin	S / <=4.0000	S / <=4.0000
Oxytetracycline	R / >8.0000	S / 1.0000
Penicillin	R / >8.0000	R / 8.0000

Diagnostic lab testing
confirms infection and
what medications work
best to treat

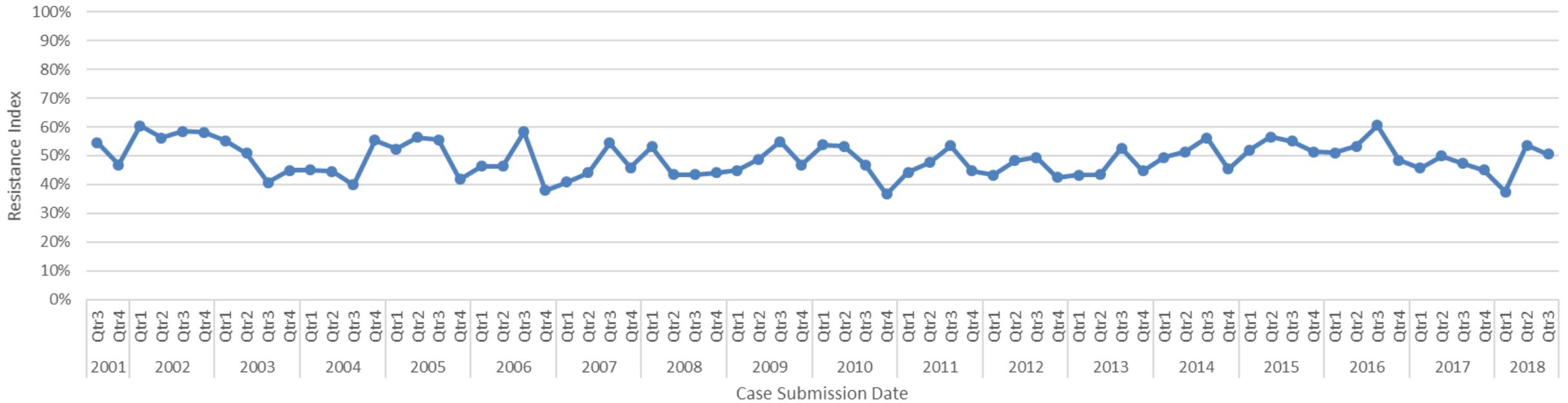


Veterinarian selects
proper treatment

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VDL Summary: Tracking resistance over time

Total Resistance Index over Time (n= 4,458 isolates)



Current Project: Alternative sites



Phenotypic evaluation of the impact of antibiotic use protocols on antimicrobial resistance patterns in PRRS virus infected swine in a naïve environment.

CARISSA ODLAND, DVM, MS-CANDIDATE
OCTOBER 12, 2018



DOING OUR PART FOR THE RESPONSIBLE USE OF ANTIBIOTICS:
RECORD, REVIEW, and RESPOND



RECORD



REVIEW



RESPOND

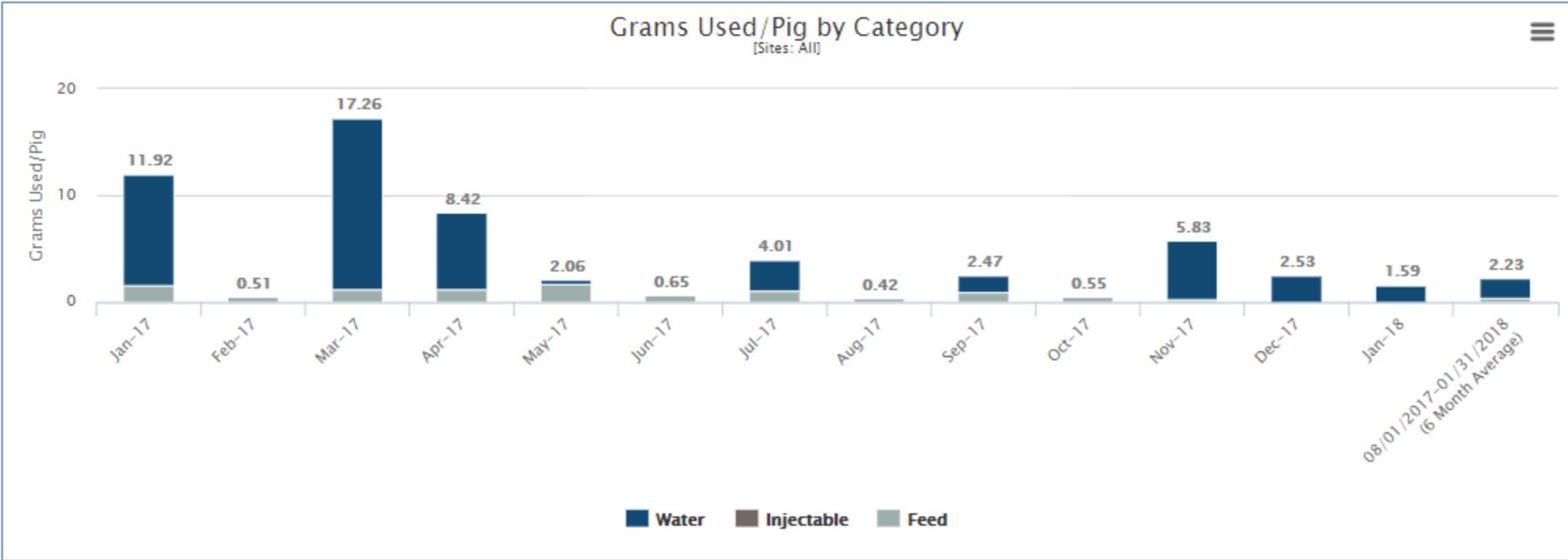
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Producer Example

On your graphs, you can filter your results further by clicking antibiotic types in the legend to turn them off or on.

Antibiotic Use ? [+/-]

Site: Style: Start date: End date:



Least, Intermediate, and Most

Least Antibiotic Use



0-2 gm/pig

Example of use:

- 20% of pigs individually treated.

Intermediate Antibiotic Use



2-15 gm/pig

Example of use:

- 20% of pigs individually treated.
- 2 water medication events.

Most Antibiotic Use



15+ gm/pig

Example of use:

- 40% of pigs individually treated.
- 4 water medication events.

Collaboration & Outreach

- Sanford Hospital
- McDonalds
- MN One Health
- USDA
- NARMS
- University of Minnesota
- South Dakota State University
- National Pork Board
- MN Pork Producers Association
- National Pork Producers Council
- National Institute of Animal Agriculture
- Graduate student funding
- Producer Webinar Series
- International Consortium on Antibiotic Stewardship in Agriculture (ICASA)

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