



PART[®]

PIPESTONE ANTIBIOTIC
RESISTANCE TRACKER

Tracking
Antibiotic
Resistance



Demonstrating
Responsible
Antibiotic Use

www.PipestonePART.com

PIPESTONE[®]

WHO IS PIPESTONE®



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

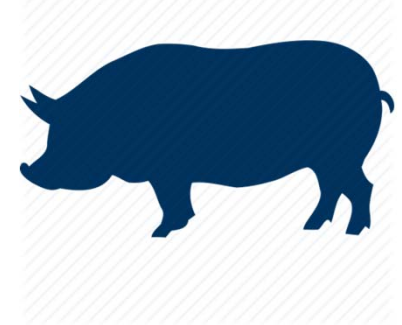
Human Health 



Food Safety 



Livestock Farms 



PIPESTONE®

Veterinary-Based



Samples
Collected and
Sent to
Diagnostic lab

Antimicrobial	E.COHL *Int/MIC	S.SC1 *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

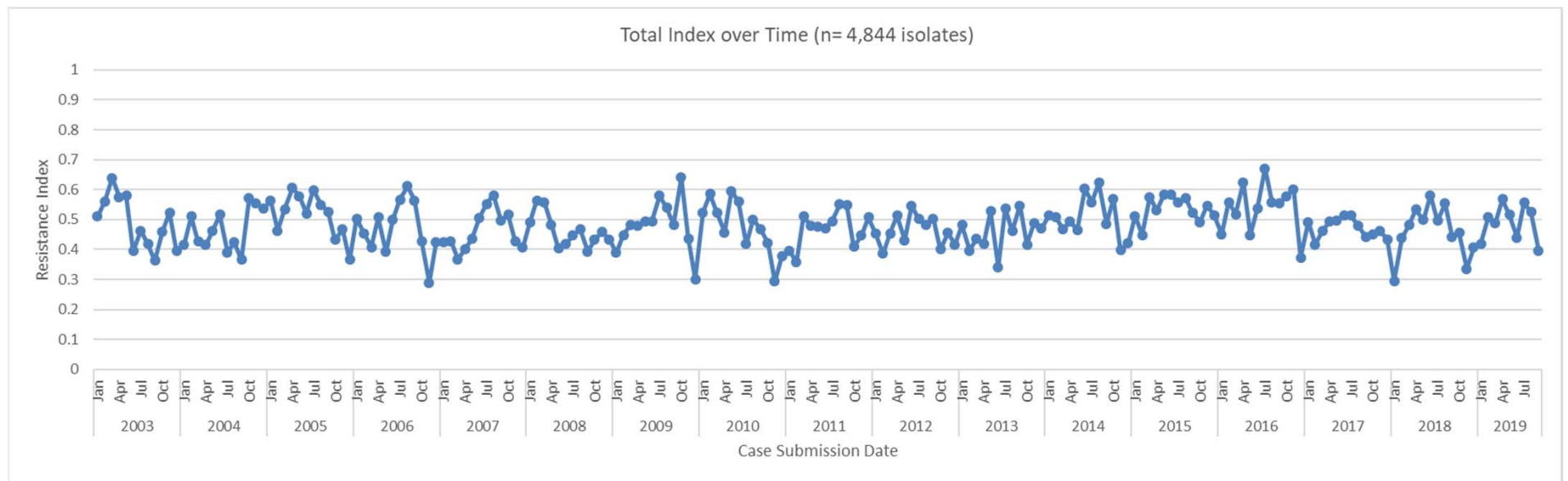
Diagnostic lab testing
confirms infection and
what medications work
best to treat



Veterinarian selects
proper treatment

PIPESTONE®

VDL Summary: Tracking resistance over time

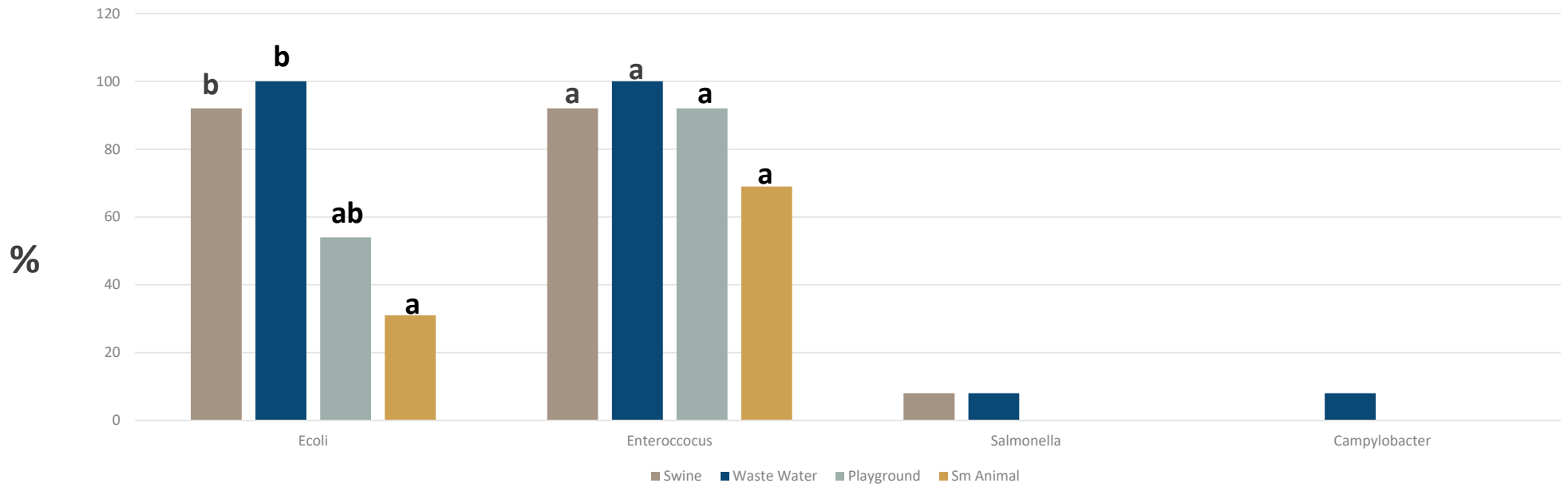


Food safety-based:

“Evaluation of AMR patterns of NARMS organisms across alternative sites”.

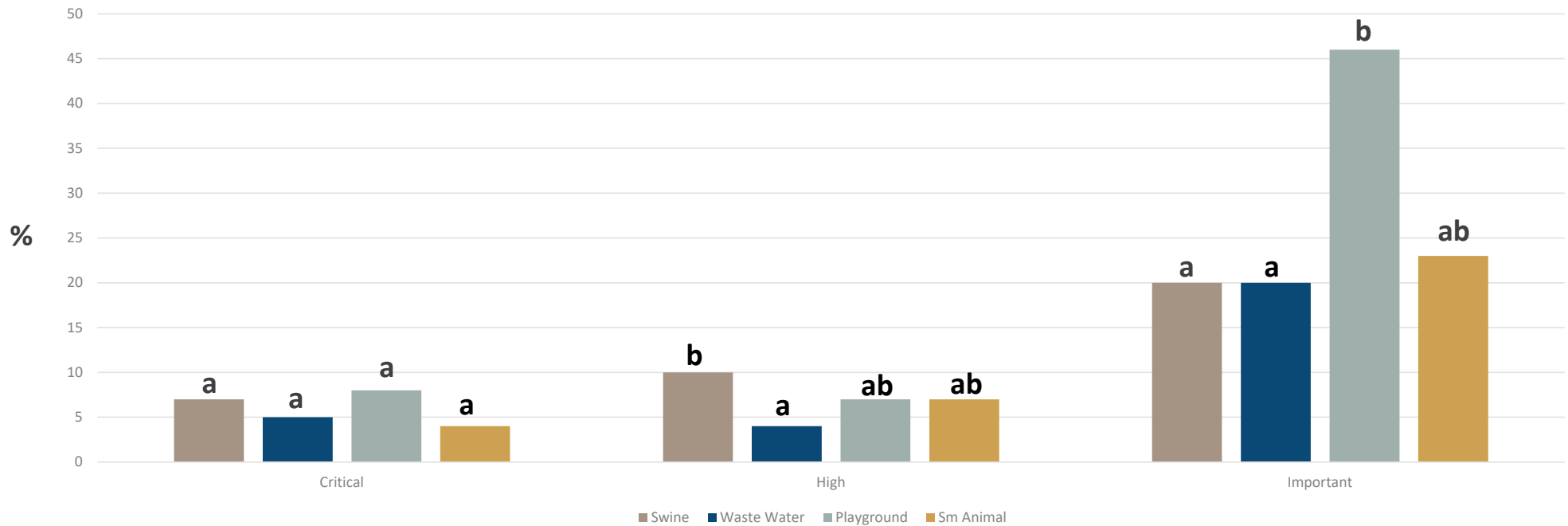


Recovery by Month and Site



PIPESTONE®

AMR Patterns by Class of Drug* and Site



* = Based on FDA list of medically important drugs

PIPESTONE®

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

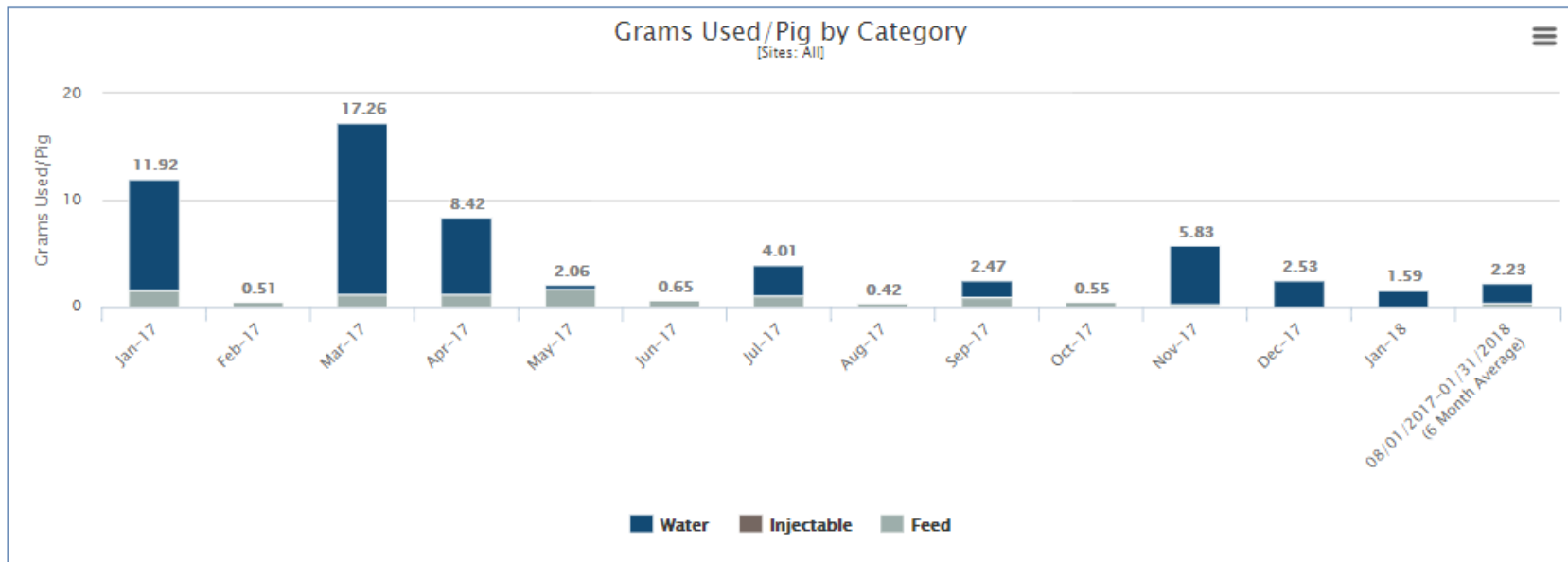
PIPESTONE®

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.

PIPESTONE®

Collaboration & Outreach

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

PIPESTONE®



www.PipestonePART.com

PIPESTONE[®]
