

## AASV Foundation – First Quarterly Report

### Title:

- Does knowledge of testing procedures or the format of culture and susceptibility reports from veterinary diagnostic laboratories (VDLs) influence antimicrobial selection decisions?

### Authors:

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### Statement of problem:

- Antibiotics, one of the greatest discoveries of humankind, continue to be threatened by growing antimicrobial resistance. To combat resistance, judicious use of antibiotics is required. To meet such standards, veterinarians need to understand the process, format, and context of information provided by VDL antimicrobial susceptibility reports.

### Objective(s):

- Determine if training how laboratory susceptibility results are generated changes antimicrobial selection.
- Determine if the format and context of antimicrobial susceptibility reports changes antimicrobial selection.

### Brief materials and methods:

- This study reviews how major swine VDLs generate and report susceptibility data and summarizes the processes into an online training module.
  - Participants will be presented three fictional cases (A, B and C) with three different levels of antimicrobial susceptibility results (1, 2 and 3). Participants will choose an antibiotic for each case prior to watching the training video. Participants will then have the option to change the selection based off of video information.
- Antibiotic selections will be compared prior to and after completion of the training video, along with an analysis of the provided case report type.
- Participants will complete an open-ended exit survey regarding report type preference and value of the training module.
- Registry of Approved Continuing Education (RACE) approval will be sought, allowing participants to earn Continuing Education (CE) credits with a Certificate of Completion.

### Significant results: *No results to report at this point in the study.*

- Progress:
  - Study protocol is finalized.
  - ISU bacteriology process is recorded and turned into an educational video.
  - ISU Institutional Review Board (IRB) application is submitted.
  - Contacts from other swine VDLs are gathered.
  - On-Line Moodle training module programming is started.
  - Cases and susceptibility results are being developed for the Moodle platform.

### Discussion of how results can be applied by practitioners: *No results to report at this point in the study.*

- Expected outcome:
  - Participants will gain further knowledge on how culture and susceptibility results are generated and reported. The educational video will provide background information and exposure to report styles. This study will provide self-awareness and possibly elicit a behavioral change for future antimicrobial selection decisions.