

# Subcommittee on Salmonella Report to CPAS 2018

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Chair, USAHA Subcommittee on Salmonella

# Agenda Topics

- Agency Summaries
  - Vet-LIRN
  - NPIP
  - NVSL
  - CDC
  - FSIS
- Salmonella Heidelberg in dairy calves
- No resolutions/recommendations
- Subcommittee review in 2019

# Salmonella Mini-Symposium

- S. Heidelberg in Dairy Calves: One Health Challenge
- Blockchain: What is it and Why Should I Care?
- One Health Benefits of Using Whole Genome Sequencing as a Tool for Herd Management
- **Past, Present and Future of Salmonella Control in Poultry**
  - Dale Lauer
- Ecology of Salmonella
  
- Wednesday 10/24 9:00 am-1200 pm Chicago C

# Earlier CPAS Presentations

- NPIP Update – Dr. Denise Heard
- NVSL Update – Brenda Morningstar-Shaw
- CDC Report – Dr. Megin Nichols

# Vet-LIRN Summary

Drs.Olgica Ceric/Renate Reimscheussel

- 24 animal feed recalls due to Salmonella
  - Primarily raw foods and treats
  - 9 of last 10 were raw product
  - 5/24 primarily poultry products, others meat combinations not listed
    - 3 chicken
    - 1 turkey
    - 1 duck
- 1 case of ground turkey product with S. Reading related to sick children

# Vet-LIRN AMR Pilot Project

- Similar to NAHLN project
- Collecting organisms from host species - AST, WGS
- All Salmonella 2017
  - 586:AST
  - 71:WGS
  - 61 total avian isolates
  - 29 serovars: Typhimurium, Dublin, Newport top 3 submitted
- All Salmonella first half 2018
  - 225:AST
  - 169:WGS

# FSIS Summary

Dr. Kristin Holt

- 2017 *Salmonella* detected in 1 of 14,645 (0.01%) samples of ready-to-eat meat and poultry products, down from 0.10% in 2016
- Routinely verify establishments meeting performance standards
  - *Salmonella* Verification Testing Program for Raw Meat and Poultry
    - Collect and analyze carcass and product samples
    - Group for Process Control Categories: 1/Consistent, 2/Variable, 3/Highly Variable
- 2017 Pasteurized Egg Products 1,687 (0%) samples
- Perform pulsed-field gel electrophoresis analysis, antimicrobial susceptibility testing, and whole genome sequencing
- Publishes its microbiological laboratory guidelines and test results on the FSIS website at [www.fsis.usda.gov](http://www.fsis.usda.gov)

# FSIS NARMS Cecal Sampling

- National Antimicrobial Resistance Monitoring System
  - WHO: Healthy animal sampling at slaughter – estimate AMR in food animals
  - March 2013
- 2014 Salmonella Data
  - Young Chickens
    - Pansusceptible 46.6%
    - Resistant 38.3%
    - MDR 14.6%
  - Young Turkeys
    - Pansusceptible 24.4%
    - Resistant 28.9%
    - MDR 46.7%\* highest of all Salmonella isolates/production types tested



# CDC Summary

Dr. Matthew Wise

- Multistate Salmonella Outbreaks – poultry related
  - 2 linked to chicken consumption (I 4,[5],12:i:- and Infantis)
  - 2 linked to shell egg consumption (Braenderup and Enteritidis)
  - Chicken salad sold at a single grocery chain (Typhimurium)
  - Multiple turkey products including ground, whole, and raw pet food (Reading)
  - Contact with backyard poultry (multiple serotypes)
  - Contact with guinea pigs (Enteritidis)
- 4 themes
  - Meat and poultry products
  - Atypical strains
  - “Repeat Offenders”
  - Multi-ingredient, pre-made foods from grocery stores

# S. Heidelberg in Dairy Calves

Drs. Elisabeth Patton/Jason Lombard

- Multi-state outbreak
- Multi-drug resistance, PFGE and WGS closely related isolates
- Multi-agency collaboration – human and animal outbreak
- Contact with dairy bull calves
- Calve morbidity and mortality
  
- Used boot cover swabbing as part if their environmental testing