Priorities for USDA involvement in Global Health Security Agenda and Antimicrobial Resistance—Secretary’s Advisory Committee on Animal Health February 2016

Dr. Joseph F. Annelli
Director, One Health Coordination Center
Senior Advisor for Agriculture and Health Systems Surveillance, Preparedness and Response
Veterinary Services
Animal and Plant Health Inspection Service (APHIS)
US Department of Agriculture
Global Health Security Agenda
Priorities of the Global Health Security Agenda

- Prevent
- Detect
- Respond
GHSA Action Packages

- Antimicrobial Resistance Action Package
- Zoonotic Disease Action Package
- Biosafety and Biosecurity Action Package
- Immunization Action Package
- National Laboratory System Action Package
- Real-Time Surveillance Action Package

- Reporting Action Package
- Workforce Development Action Package
- Emergency Operations Centers Action Package
- Linkages and Multisectoral Rapid Response Action Package
- Medical Countermeasures and Personnel Deployment Action Package
Antimicrobial Resistance

- USDA Antimicrobial Resistance plan
- VS baseline studies
- FDA/APHIS collaborations
National and International Action Plans

• Global Health Security Agenda AMR Action Package
• WHO Global Action Plan for AMR
• National Action Plan for Combatting Antibiotic Resistant Bacteria (CARB)
• USDA AMR Action Plan
  – Surveillance
  – Research and development
  – Education, extension and outreach
The complexity of antimicrobial resistance!

AQUACULTURE
Cultured finfish, shellfish, shrimp

Sea
Swimming

Drinking Water

Wells, rivers and streams

Sewage

Farm effluents and manure spreading

Vegetation, seed crops, fruit

Drinking Water

BIRDS and WILDLIFE

Direct Contact

FOOD ANIMALS
Sheep, Beef Cattle, Dairy, Swine, Poultry

Animal feeds

Rendering

Offal

Commercial abattoirs

Meat

Handling, preparation, consumption

HUMANS
URBAN RURAL HOSPITALIZATION

Direct Contact

COMPANION ANIMALS
National Strategy on Combating Antibiotic-Resistant Bacteria

• Slow the emergence and prevent the spread of resistant bacteria.

• Strengthen National efforts to identify and report cases of antibiotic resistance.

• Advance the development and use of rapid diagnostic tests for the identification and characterization of antibiotic-resistant bacteria.

• Accelerate basic and applied research and development for new antibiotics as well as other therapeutics and vaccines.

• Improve international collaboration, capacities for antibiotic-resistance prevention, surveillance, control, and antibiotic research and development.
VS & Antimicrobial Resistance (AMR)

• FDA: finalized guidance document April 2012
  ➢ Use antimicrobials only when necessary
  ➢ Proposed guidance to facilitate discussion

• VS: some antibiotic use can lead to AMR
  ➢ Antimicrobials should be used judiciously

• VS: does not support broad elimination
Judicious use

**Judicious use** includes a consideration by the veterinarian of relevant factors for is appropriate in a particular situation. Determining the risk of a specific bacterial disease *and* for determining whether the use of medically important antimicrobials for prevention purposes *(therapeutic)*

1. there is evidence of effectiveness,
2. such a preventive use is consistent with accepted veterinary practice,
3. the use is linked to a specific etiologic agent,
4. the use is appropriately targeted to animals at risk of developing a specific disease, and
5. no reasonable alternatives for intervention exist.
Committee Deliberation

- The importance of the GHSA and AMR, but the lack of specific funding to USDA, raise the following questions that we would like the Committee to address: What are SACAH’s priorities for USDA/APHIS/VS involvement/action in GHSA and AMR with no/limited funding?

- What are SACAH’s suggestions for obtaining resources to implement USDA AMR Action Plan and GHSA Action Packages?

- Lacking the support of agriculture stakeholders, should USDA consider regulatory approaches to animal health monitoring for AMR? For monitoring responsible use of the VFD as part of veterinary accreditation?
• Should the Secretary consider asking Congress for a supplemental appropriation?

• The 2016 request for 200,000 dollars per State is far too modest to implement the USDA action plan on an accelerated schedule. What should USDA provide to garner stakeholder support for an additional continuing yearly 100 million dollar budget in support of laboratory diagnostics, whole gene sequencing, data gathering and data quality assurance, surveillance and monitoring, education and outreach, and communications?

• Should USDA shift its stakeholder support base to a more consumer concern, human health concern, and food safety focus for support of its AMR plan?