



United States
Department of
Agriculture

Office of the
Chief Scientist

Combating Antibiotic Resistant Bacteria: USDA



OCS

USDA OFFICE OF THE CHIEF SCIENTIST

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United States
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Chief Scientist

Outline

- Overview of USDA agencies/offices
- USDA Antimicrobial Resistance (AMR) Action Plan
- USDA Science Blueprint





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USDA Agencies/Offices

1. **Animal and Plant Health Inspection Service (APHIS)**
2. **Agricultural Marketing Service (AMS)**
3. **Agricultural Research Service (ARS)**
4. **Economic Research Service (ERS)**
5. **Food Safety and Inspection Service (FSIS)**
6. **Foreign Agricultural Service (FAS)**
7. **National Agricultural Statistics Service (NASS)**
8. **National Institute of Food and Agriculture (NIFA)**
9. **Office of Pest Management Policy**
10. **Office of the Chief Scientist**



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THE COLLECTIVE AMR ECOSYSTEM



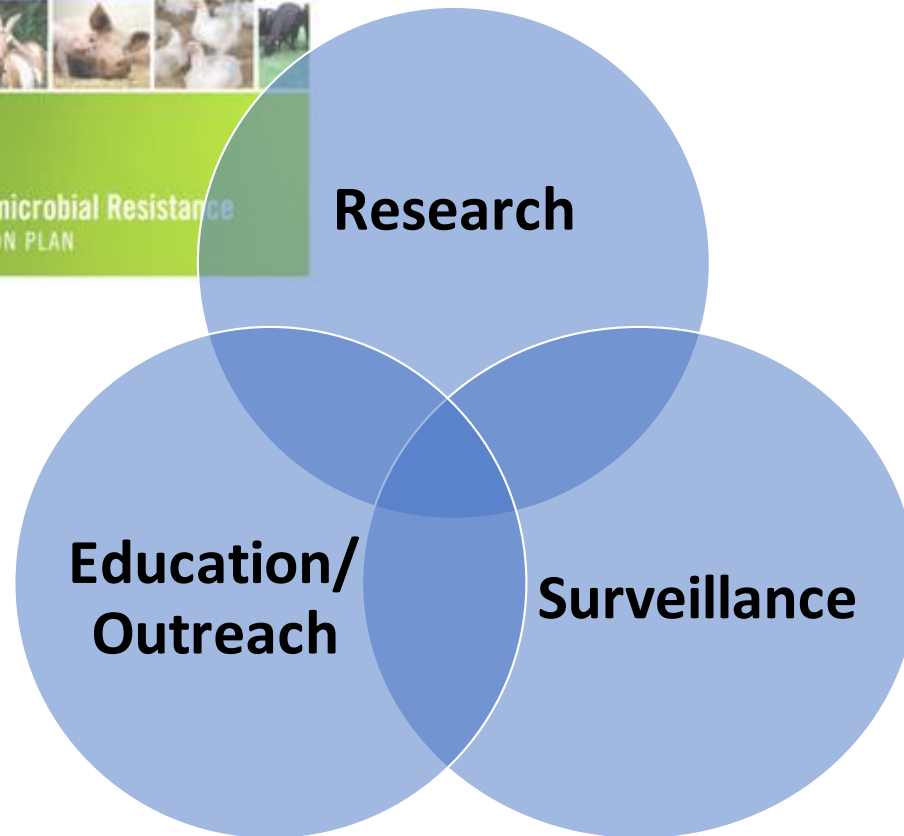
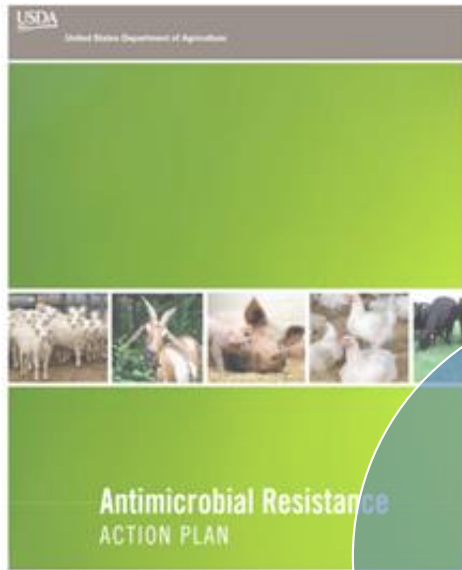


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USDA AMR ACTION PLAN

**Basis for USDA work on the
Combating Antibiotic
Resistant Bacteria National
Action Plan**



Objective 1: Determine and/or model patterns, purposes, and impacts of antibiotic use in food-producing animals.

Objective 2: Monitor antibiotic drug susceptibilities of selected bacterial organisms in food-producing animals, production environments, and meat and poultry.

Objective 3: Identify feasible management practices, alternatives to antibiotic use, and other mitigations to reduce AMR associated with food-producing animals and their production environments.

RISK VS. HAZARD

Hazard: A biological, chemical or physical agent in, or condition of, food with the **POTENTIAL** to cause an adverse health effect. **AMR microorganism(s) and /or resistance determinant(s)**

Risk = likelihood that a hazard **WILL** cause harm

AMR food safety issue for risk assessment: Combination of the hazard(s) (AMR microorganisms and / or determinant(s)), the antimicrobial agent(s) to which resistance is expressed and the food commodity in which the hazard is identified **(bug-drug-food commodity combination)** (*Codex Guidelines on Foodborne AMR Risk Analysis-[CAC-GL 77-2011](#)*)



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USDA SCIENCE BLUEPRINT



QUESTIONS?

