

A stylized world map outline in a light tan color, centered on a dark blue background. The map shows the continents and major landmasses.

# **Goal 5: International Collaboration**

**Jimmy Kolker**

**Assistant Secretary for Global Affairs**

**U.S. Department of Health and Human Services**

# Projected Outcome

- Improve International Collaboration and Capacities for
  - Antibiotic Resistance Prevention,
  - Surveillance,
  - Control,
  - and Antibiotic Research and Development

# International AMR Efforts



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# Objective 5.1

Promote laboratory capability to identify at least three of the seven WHO priority antimicrobial resistant (AMR) pathogens using standardized, reliable detection assays.

The WHO AMR Pathogens and types of resistance of concern include:

- *Escherichia coli*: resistance to 3rd generation cephalosporins and to fluoroquinolones
- *Klebsiella pneumoniae*: resistance to 3rd generation cephalosporins and to carbapenems
- *Staphylococcus aureus*: methicillin resistance, or MRSA
- *Streptococcus pneumoniae*: resistance (non-susceptibility) to penicillin
- *Non-typhoidal Salmonella (NTS)*: resistance to fluoroquinolones
- *Shigella species*: resistance to fluoroquinolones
- *Neisseria gonorrhoeae*: reduced susceptibility to 3rd generation cephalosporins

# Objective 5.3

Develop a mechanism for international communication of critical events that may signify new resistance trends with global public and animal health implications.

# Objective 5.4

Promote the generation and dissemination of information needed to effectively address antibiotic-resistance.

# Objective 5.5

Establish and promote international collaboration and public-private partnerships to incentivize development of new therapeutics to counter antibiotic resistance, including new, next-generation, and other alternatives to antibiotics, vaccines, and affordable, rapidly deployable, point-of-need diagnostics.

# Objective 5.6

Support countries to develop and implement national plans to combat antibiotic resistance and strategies to enhance antimicrobial stewardship.



# Challenges



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THANK YOU

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# USDA Inputs for Goal 5: International Coordination

**John Clifford, DVM**

**Chief Veterinarian and Deputy Administrator**

**Veterinary Services, Animal and Plant Health Inspection  
Service**

**US Department of Agriculture**

# Objective 5.2

**Collaborate with WHO, OIE, and international efforts focused on development of lab surveillance to detect/monitor AR in animal/human foodborne pathogens**

# Objective 5.2

Within one year:

USDA, FDA, CDC will develop a plan, in partnership with WHO, Pan American Health Organization (PAHO), and other international organizations to identify key partner labs that conduct AMR testing of animal foodborne pathogens

# Objective 5.8

**Coordinate regulatory approaches by collaborating with international organizations such as FAO and OIE to harmonize international data submission requirements and risk assessment guidelines related to the licensure and/or approval of veterinary medicinal products, including antibacterial agents, vaccines, and diagnostics, to the extent possible.**

# Objective 5.8

Within one year:

FDA and USDA will contribute to and participate in global or regional cooperation with international organizations, including Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR), International Cooperation on Harmonization of Technical Requirements for Veterinary Medicinal Products (VICH), etc. regarding development of vaccines, antibacterial drugs, and diagnostic tests for use in agriculture, and regarding risk assessments of the use of medically important antibiotics in agriculture.

# Objective 5.8

**Within one year:**

**USDA will maintain the US commitment to VICH and International Institute for International Cooperation in Animal Biologics (IICAB), expanding the Global Outreach Forum to:**

- a) Promote the use of VICH guidance for safety, quality, potency, and effective use of vaccines;**
- b) facilitate input from a broadened base of participating countries and economies.**



# Objective 5.8

**Within one year:**

**USDA will plan and participate in at least three VICH Global Outreach Forums over the first two years**

# Objective 5.8

**Within one year:**

**USDA will hold at least one international meeting in collaboration with IICAB to discuss US regulatory policy in a workshop setting.**

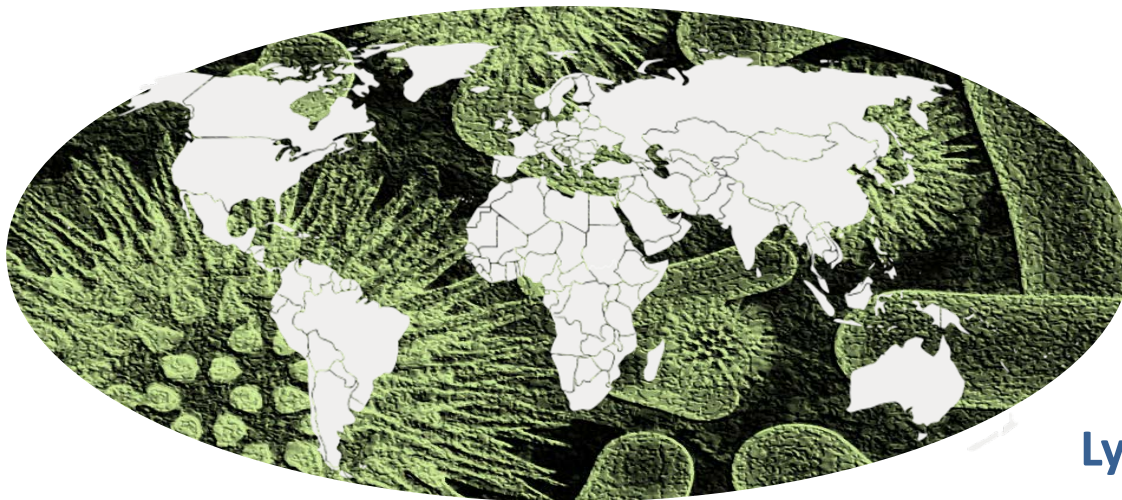
# For Consideration

- **Significant challenges to harmonization**
  - Data collection is resource intense
  - Data comparisons by regions/countries are often not meaningful
- **What does the Council see as the most critical priorities for addressing antimicrobial resistance internationally and what would be some effective mechanisms to address these?**

# Thank You

## Resources:

- **USDA AMR Action Plan:** <http://www.usda.gov/documents/usda-antimicrobial-resistance-action-plan.pdf>
- **OIE Antimicrobial Resistance Resources:**  
<http://www.oie.int/our-scientific-expertise/veterinary-products/antimicrobials/>



**Lynette Poulton**

Director

Office of International Health and Biodefence

Oceans, Environment, and Science

U.S. Department of State

# Domestic Action Alone is Insufficient

Antimicrobial resistance is a global problem..



...requiring global solutions

## The State Department's Mission

To shape and sustain a peaceful, prosperous, just, and democratic world and foster conditions for stability and progress for the benefit of the American people and people everywhere. This mission is shared with the USAID, ensuring we have a common path forward in partnership as we invest in the shared security and prosperity that will ultimately better prepare us for the challenges of tomorrow. From the FY 2014 Agency Financial Report, November 2014



Healthy people make for stronger, more prosperous, and more stable nations; enhance international security and trade; and ensure a safer, more resilient America.

## State Department Commitment to Combat AMR

Diplomatic, foreign policy and programmatic engagement to:

Secure greater involvement across all sectors

Expand the impact of U.S. global investments

Ensure evidence-based decision-making



# Ownership of AMR Solutions: Whole of Society Approach



## Ongoing Areas of Work

### Advocacy

Enhanced bilateral, regional, and multilateral engagement to mobilize international financial, political, and operational support to combat antimicrobial resistance



## Ongoing Areas of Work

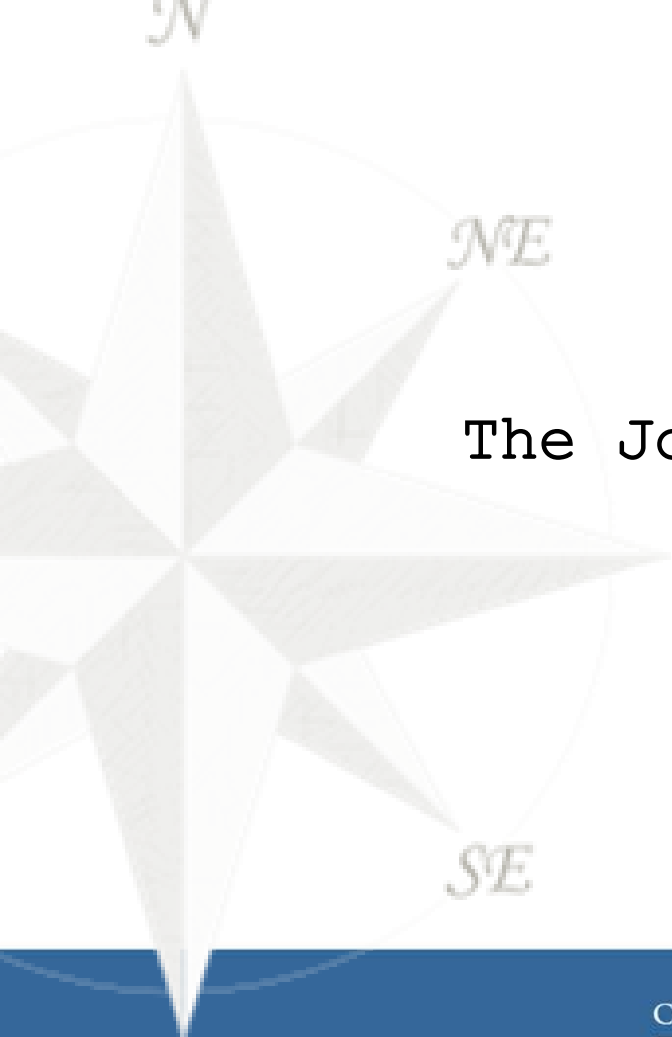
### Augmentation

Enhanced bilateral and multilateral engagement to expand the impact of U.S. global investments (for example implementation of bilateral S&T agreements)

### Programmatic

Pilot programs pursuing innovative approaches to engage new stakeholders including citizen-science and faith-based communities.

Technical assistance led by USAID to scale up multidrug-resistant TB treatment programs in over 25 countries.



The Journey has Just Begun

# GOAL 5: Improve International Collaboration and Capacities for Antibiotic-resistance Prevention, Surveillance, Control, and Antibiotic Research and Development

29 SEP 15

Dr. David Smith

Deputy Assistant Secretary of Defense (Health Affairs)  
Health Readiness Policy and Oversight



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# Goal 5: DoD

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- AMR is a global problem and requires an integrated solution
- DoD, with its worldwide footprint – often in very austere areas, is positioned to advance this coordinated response

# Goal 5: DoD



- MRSN and AFHSC-GEIS
  - In alignment with GHSA, WHO International Health Regulations core capacities, and cooperation and capacity building partnerships with international partners (N/S/C America, Africa, Asia, Europe, Australia, Middle East)

# Goal 5: DoD

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- Walter Reed Army Institute of Research (WRAIR)
  - Testing of candidate compounds
  - Standardizing animal model/small molecule testing pathways
  - Conducting advanced characterization to understand mechanisms of resistance



# Goal 5: DoD

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- Military Infectious Disease Research Program (MIDRP), Ft. Detrick
  - Rapid diagnostics for quantitative identification and resistance phenotyping
  - Novel antimicrobial delivery system
  - Identification of human and bacterial biomarkers
  - Epidemiologic studies of soft-tissue infections

# Goal 5: DoD

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- Naval Medical Research Center
  - Observational study of sepsis in austere environments
  - Molecular markers of drug resistance – SE Asia

# Goal 5: DoD



- Joint Science & Technology Office (JSTO), Chemical & Biological Defense (CBD), US Army Medical Research Institute for Infectious Diseases (USMARIID)
  - Leverage existing programs for new and re-purposed therapeutics

THANK YOU