NARMS Public Meeting Agenda October 13-14, 2020

DAY 1

10.30 AW - 11.00 AW Welcome				
10:30 AM – 10:40 AM	Welcome address –Dr. Steven Solomon, (FDA)			
10:40 AM – 11:00 AM	The NARMS Strategic Plan & the Meeting Agenda –Dr. Patrick McDermott (FDA)			

11:00 AM – 1:30 PM	Goal 1: Enhance Sampling for Foodborne Pathogens within a One Health
	Framework

Moderator Dr. Errol Strain (FDA)

10:30 AM - 11:00 AM Welcome

 $11:05 \; \mathsf{AM-11}:30 \; \mathsf{AM} \quad \mathsf{Objective} \; 1.2: \\ \mathsf{Implement} \; \mathsf{geographically-representative} \; \mathsf{monitoring} \; \mathsf{including} \; \mathsf{Included} \;$

surface waters to establish baseline AMR data in aquatic ecosystems

One Health monitoring for antibiotic resistance: An isolate-based approach – Dr.

Amy Kirby (CDC)

Development and implementation of surface water pilot study within NARMS –

Dr. Jay Garland (EPA)

11:35 AM – 12:00 PM Objective 1.1: Enhance and maintain routine resistance monitoring in select

pathogens causing illness in food-producing and companion animals

Vet-LIRN AMR monitoring program from 2017 to 2019: Enhancing the One Health initiative by monitoring resistance in animal pathogens - Dr. Olga Ceric

(FDA)

National Animal Health Laboratory Network (NAHLN) Antimicrobial Resistance

Pilot Project Year 2 – Dr. Beth Harris (APHIS)

12:00 PM - 1:00 PM Lunch

1:00 PM - 1:30 PM Q & A Goal 1

1:30 PM – 3:55 PM Goal 2: Employ Advanced Technologies to Better Understand the Evolution

and Spread of Resistance among Foodborne Pathogens

Moderators Dr. Jean Whichard (CDC)

1:35 PM – 1:45 PM Objective 2.2: Optimize in vitro antimicrobial susceptibility testing to identify

new resistance mechanisms.

Overview of Phenotyping	in The A	Age of WGS –	Dr.	Gregory	Tyson	(FDA)

1:45 PM –2:05 PM Objective 2.1: Apply predictive resistance analytics, machine learning, and other

bioinformatics tools to NARMS-related data to better understand the

mechanisms, sources, and spread of resistance

Phenotype to genotype transition: Considerations – Dr. Mustafa Simmons (FSIS)

Beyond predicted resistance: CDC's efforts towards improved detection and characterization of antimicrobial resistant outbreak clusters – Dr. Jessica Chen

(CDC)

2:05 PM — 2:25 PM Objective 2.3: Develop metagenomic approaches to characterize the resistome

of animals, humans and environmental samples and to link resistance genes to

their microbial hosts

CIDTs mean fewer cultures for AMR Surveillance: The Metagenomics Path

Forward – Dr. Andrew Huang (CDC), Dr. Jo Williams (CDC)

 $\label{lem:metagenomics} \mbox{Metagenomics insights into the animal and environmental resistome intersect-}$

Dr. Daniel Tadesse (FDA)

2:25 PM - 2:45 PM Break

2:45 PM – 3:05 PM Objective 2.4: Employ long-read DNA sequencing methods to establish a

reference database of fully characterized strains and their plasmids.

Improved plasmid classification: Plasmid Taxonomic Units (PTUs) – Dr. Kaitlin

Tagg (CDC)

Generating reference libraries of closed plasmids and genomes for AMR

surveillance - Dr Shaohua Zhao (FDA)

3:05 PM - 3:50 PM Q & A Goal 2

3:50-4:00 PM Day 1 Closing Remarks – Dr. Patrick McDermott (FDA)

DAY 2

9:30 AM – 9:40 AM Welcome and Review of Day 2 Agenda – Dr. Patrick McDermott (FDA)

9:40 AM – 10:55 AM Goal 3: Improve Data Sharing, Communication and Collaboration

Moderator Dr. Patrick McDermott (FDA)

9:45 AM – 10:30 AM Objective 3.1: Deposit microbiological data into public databases and post

timely web-based updates that describe emergent resistance phenomena for

timely response by all stakeholders.

NCBI tools for AMR surveillance – Michael Feldgarden (NCBI)

 $\label{lem:continuous} Resistome\ Tracker:\ Monitoring\ antibiotic-resistant\ bacteria\ by\ their\ genes-Dr.$

Heather Tate (FDA)

CDC NARMS data sharing and communication – Mr. Jared Reynolds (CDC)

FSIS NARMS data sharing and communication – Dr. Uday Dessai (FSIS)

10:30 AM - 11:00 AM Q & A Goal 3

11:00 AM – 11:45 AM Goal 4: Conduct Research to Assess the Sources and Impacts of Resistance and

the Effectiveness of Prevention Practices for Foodborne Pathogens

Moderator Dr. Sue Gerber (CDC)

11:05 AM – 11:35 AM Objective 4.1: Collaborate with partners to understand prevention practices

including non-antimicrobial interventions (e.g., bacteriophages, vaccines,

husbandry) and their impact on resistance

Partnering of industry, regulatory and research agencies to investigate the emergence of outbreak-associated *Salmonella enterica* serovar Reading isolates

from turkey products – Dr. Shawn Bearson (ARS)

Objective 4.2: Conduct studies to assess risk factors for antimicrobial-resistant

infections and to attribute infections to foods, animals, environmental and

other sources.

Antimicrobial resistance on farms: The role of wildlife – Dr. Jeffery Chandler

(APHIS)

From the pet industry to veal calves: Examining disease prevention,

antimicrobial use and resistance across the One Health spectrum through

fundamental science – Dr. Megin Nichols (CDC)

11:35 AM - 11:55 AM Q & A Goal 4

11:55 AM -12:10 PM Break

12:10 PM – 3:10 PM Stakeholder AMR Updates

Moderator	Dr. Gamola Fortenberry (FSIS) and Dr. Uday Dessai (FSIS)
12:15 AM – 12:25 AM	Poultry – Dr. Ashley Peterson, National Chicken Council
12:25 PM – 12:35 PM	Swine – Dr. Heather Fowler, National Pork Producers
12:35 PM – 12:45 PM	Cattle – Dr. Mandy Carr-Johnson, National Cattlemen's Beef Association
12:50 PM – 1:00 PM	Aquaculture – TBD
1:00 PM – 1:45 PM	Lunch
1:45 PM – 1:55 PM	NARMS in 2020: A Consumer Advocacy Perspective – Steve Roach, Keep Antibiotics Working
1:55 PM – 2:05 PM	The Pew Charitable Trusts: Perspectives on the National Antimicrobial Resistance Monitoring System (NARMS) – Kyle Kinner, Pew
2:05 PM – 3:00 PM	Q & A Stakeholders
3:00 PM - 3:10 PM	Break
3:10 PM - 4:10 PM	Public Commentary
4:15-4:30	Closing remarks and adjourn – Dr. Patrick McDermott (FDA)