



The Global Voice for
the U.S. Pork Industry

National Pork Producers Council
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Dockets Management Staff (HFA-305)
Food and Drug Administration
5630 Fishers Lane, Rm. 1061
Rockville, MD 20852

RE: National Antimicrobial Resistance Monitoring System 2026-2030 Strategic Plan (Docket No. FDA-2024-N-5538)

To Whom it May Concern,

The National Pork Producers Council (NPPC) appreciates the opportunity to comment on the National Antimicrobial Resistance Monitoring System (NARMS) 2026-2030 Strategic Plan. NPPC is the global voice for the U.S. pork industry and consists of 42 affiliated state organizations representing America's 60,000+ pork producers who supply a demonstrably safe, wholesome, and nutritious protein appreciated on American and international tables.

Pork producers care deeply about protecting food safety, public and animal health, and the environment. Working for decades to constantly improve antimicrobial use practices, the U.S. pork industry was the first to implement species-specific judicious use guidelines – Pork Quality Assurance Plus (PQA+) – which includes responsible antimicrobial use principles and recommendations that have been continuously updated for over 20 years. PQA+ participants are evaluated on their understanding of these concepts, and on-farm assessments are conducted to document implementation. Many producers also go through a third-party audit to verify their adherence to PQA+ standards. Pork producers partnered with the U.S. Food and Drug Administration (FDA) to successfully implement Guidance #213, recruiting producers for the pilot program to collect on-farm antimicrobial use data. NPPC has advocated for robust funding streams for the NARMS program over the years, as the data continues to be valuable in industry decision making. NPPC appreciates our collaborations with FDA and the U.S. Department of Agriculture (USDA) in addressing the issues of antimicrobial resistance (AMR) through surveillance, monitoring, responsible use, and other initiatives.

NPPC believes that the long-standing objectives of NARMS, as outlined by the NARMS Review Subcommittee of the FDA Science Board or the NARMS Review Committee (NRC), are appropriate and supportable. These objectives include:

1. Monitoring trends in antimicrobial resistance among enteric bacteria from humans, retail meats, and animals at the time of slaughter;
2. Disseminating timely information on antimicrobial resistance in pathogenic and commensal microorganisms to stakeholders in the U.S. and abroad to promote interventions that reduce resistance among foodborne bacteria;
3. Conducting research to better understand the emergence, persistence, and spread of antimicrobial resistance;
4. Providing timely antimicrobial resistance data for outbreak investigations; and
5. Providing data that assist the FDA in making decisions related to the approval of safe and effective antimicrobial drugs for animals.

Focus NARMS Program on Original Scope

NPPC recommends that the NARMS program return to its original scope and remain focused on foodborne AMR. NPPC understands that the NARMS 2021-2025 strategic plan was based on expanding the One Health approach, which NPPC supports. Pork producers work at the intersection of animal, environmental, and human health. Thus, providing safe food is paramount. And while producers support, and in fact live One Health on a daily basis, we are still very concerned that using the One Health concept will continue to diminish the focus of NARMS on AMR surveillance and research in foodborne enteric bacteria.

Over the years, the NARMS program has focused on foodborne enteric pathogens and became a robust, usable program because of that commitment. For example, NARMS previously sampled veterinary diagnostic submissions for AMR. However, NPPC supported the FDA decision to stop this sampling program, as the samples came from unhealthy animals, which do not enter the food supply. Therefore, it was illogical for a public health-facing program to continue this sample stream. Currently, NARMS is once again collecting diagnostic laboratory samples, and therefore diluting its focus on foodborne enteric pathogens. When the objectives were constant and focused in the past, they fostered commitment to the program and provided clear guidance to sampling, analysis, and research projects.

NPPC believes that instead of taking a haphazard approach to collecting and testing disparate samples under various pilot projects, the NARMS program should focus on the original intent with sampling. NPPC is concerned with lack of representative samples in the expansion of NARMS sample types. For example, NARMS added cecal sampling in swine despite previous research showing the effects of lairage and transportation result in very different levels of pathogens such as salmonella when compared to those same animals on farm. NARMS now collects, tests, and reports results from thousands of cecal samples at high cost that may have no relevance to public health and do not help producers and veterinarians make decisions on the farm. NPPC has similar concerns that the pilot

projects on surface water sampling will be convenience samples, based on some EPA designation of impaired or not impaired water and without consideration for representativeness or sources of potential contamination, resulting in data that may not help either public health agencies or agriculture to make meaningful decisions.

NPPC appreciates the consideration for stakeholder input in this strategic plan, as strong stakeholder buy-in is critical for support of the NARMS program and will allow proper utilization of data to help inform public health and agriculture. Below are some responses for consideration:

1. How do you use NARMS human, animal, and retail data? Do you use other sources of AMR data for your program?

NARMS data is used specifically for food safety. It is important to understand that animal health veterinary diagnostic laboratories develop their own antibiograms for animal pathogens. Therefore, NARMS should focus only on the food safety mission, as Veterinary Diagnostic Laboratory (VDL) submissions squander resources. By having consistent NARMS sampling and reporting, AMR trends can be evaluated.

2. Are you using these data for risk management activities, including implementation of mitigation and prevention strategies?

The pork industry promotes mitigation and prevention strategies through the PQA+ program. The data collected from NARMS allows the pork industry to understand how preventative strategies are working and help guide programs and research.

3. What aspects of the NARMS data do you find most useful and why?

The retail meat samples are useful in understanding attribution data. However, this can also be detrimental when correlating to human isolates, as it is not always understood how these samples connect. This data can help lead the industry to look at more research that may be needed to understand the attribution data.

4. Is there additional AMR information that you would want NARMS to collect that is not currently being collected? Alternatively, are there any current aspects of NARMS that could or should be discontinued and, if so, why?

There is no additional information to be collected. Instead, the pilot projects focused on surface water and VDLs dilute the mission and the focus of the program. The NARMS program can

strengthen their mission of food safety by isolating bacteria to measure phenotypic versus genotypic resistance.

5. Considering that One Health is an approach that recognizes that the health of people is closely connected to the health of animals and our shared environment, what approaches could NARMS use to conduct monitoring within the One Health framework?

The swine industry is committed to One Health and supports the role veterinarians serve as experts in this field. The NARMS program can utilize the expertise of production veterinarians as well as veterinary microbiologists in the design and implementation of One Health regarding animal health.

6. What data-sharing capacities are available for interested parties to collaborate with NARMS more effectively?

Accurate context within the NARMS reports is critical to understanding the data. The swine industry cautions using subjective findings that would not include all background information to accurately represent data findings.

7. What type of NARMS analyses, data visualization, and/or reporting do you think are needed to demonstrate whether there are changes in AMR as a result of antimicrobial stewardship and animal management practices?

With a broad-based surveillance and monitoring system and a complex relationship between antimicrobial use (AMU) and antimicrobial resistance (AMR), it is unlikely data will show human AMR changes. Also, because AMR is a One Health issue, the lack of data from other contributing factors, such as human AMR, creates bias, as this is only focused on animal use/management practices.

8. What research do you think is needed to demonstrate whether there are changes in AMR as a result of antimicrobial stewardship and animal management practices?

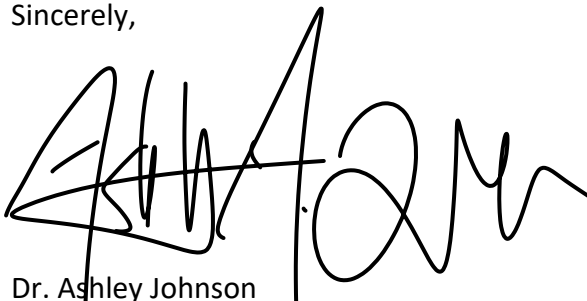
Long term longitudinal studies are the only way in an animal population to accomplish this. To yield useful data on a large scale, this would be very costly. Even with a study, it would be incredibly difficult to connect AMR in humans and almost impossible to account for any confounders.

9. If not covered under the above questions, specifically include at least one item that you think should be considered in the development of the 2026-2030 NARMS Strategic Plan. As we discussed – return to basics.

Retail meats and human isolates are cornerstones of the program. Health animal samples are difficult to obtain, but if there is a source, they could be included in the database.

NARMS is a critical program that has demonstrated trends indicating effectiveness of interventions that have reduced foodborne bacteria resistance. In the past 25 years, the program showed substantial reductions of Salmonella isolates from pork, chicken, turkey, and beef in retail meat samples as well as reductions of those Salmonella isolates with genes associated with antimicrobial resistance. The NARMS program must feature and reflect the pork industry's progress from both veterinary and producer interventions that have led to this decrease. The National Pork Producers Council is grateful for the opportunity to comment and stands ready to provide input and collaborate on the NARMS Strategic Plan revision to help continue providing valuable data on foodborne AMR.

Sincerely,



Dr. Ashley Johnson
Director of Food Policy
National Pork Producers Council