

One Health: NARMS and FSIS

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Under the holistic One Health approach, relationships between the health of humans, animals, plants, and the environment are studied in an integrated manner. In the United States the recently published Strategic Plan (2020-2025) for Combating Antibiotic Resistant Bacteria ([CARB](#)), the [USDA Antimicrobial Resistance \(AMR\) Action Plan](#), and the newly published [NARMS strategic plan](#) (2021-2025), all emphasize the role of the One Health approach to address AMR. Internationally, many organizations also focus on promoting and utilizing the One Health approach to control the spread of diseases between animals and humans (zoonosis) and to combat AMR.

Antimicrobial resistance (AMR) has been an area of focus during the past two decades as USDA plays a dual role in protecting animal agriculture and public health. USDA recognizes AMR as a potential and serious threat and focuses on surveillance, research and development, and education, extension, and outreach. The Food Safety and Inspection Service (FSIS) is a USDA agency which gathers AMR information from food animals at slaughter under the National Antimicrobial Resistance Monitoring (NARMS) program. Under NARMS, FSIS and U.S. Food and Drug Administration (FDA) collaborate to gather AMR information on foodborne zoonotic pathogens and indicator bacteria. The recent efforts to expand NARMS from a public health to One Health focus can be seen in the new [NARMS Strategic Plan \(2021-2025\)](#). In support of this change in NARMS, as well as the USDA AMR and the CARB plans, FSIS has expanded its NARMS program by including additional animal species, commodities, and target microorganisms. These include cecal AMR testing for the NARMS bacteria in minor species (sheep, goat, lamb) and veal; testing for indicator bacteria in siluriformes fish (catfish), testing for *Salmonella* in cattle lymph nodes; and screening for specific type of AMR as well as microbial diversity directly from cecal (animal intestinal) samples. The expansion in FSIS NARMS will help FSIS and the 'NARMS/One Health' partners to connect human health, animal health and the environment more effectively with respect to food safety and zoonosis and help curb AMR along the farm-to-fork continuum. For more information on NARMS visit the [FSIS NARMS Webpage](#).

While FSIS and the other federal partners actively engage in the AMR work, consumers should remain vigilant about pathogens in their foods. To protect individuals and families from foodborne pathogens, FSIS recommends the four safe food preparation steps: Clean, Separate, Cook and Chill.