

ERS Peer Review Plan

Preliminary Title: Veterinary Feed Directives and Antibiotic Use in Cattle and Hogs

Type of Report (ERR, EIB, EB) ERR

Agency: Economic Research Service [X] Influential Scientific Information
USDA [] Highly Influential Scientific Assessment

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Subject of Review: Proper use of antibiotics is necessary for the health of animal livestock. However, frequent use of antibiotic treatments in animal production can promote antibiotic-resistant bacteria. The rise of antibiotic-resistant bacteria has brought about significant concerns for human and animal health as well as costs for the human health care system and livestock producers. The judicious use of antibiotics promotes animal health while mitigating selection pressures. On January 1, 2017, the Food and Drug Administration (FDA) implemented a Veterinary Feed Directive (VFD) regulation requiring veterinarian oversight and authorization of medically important antibiotics, which are also used in human medicine, administered via feed. This report examines the VFD usage of livestock operations, examining differences in usage by cow-calf and hog farms according to their operation characteristics. The 2018 USDA's Agricultural Resource Management Survey (ARMS) cow-calf version and 2020 ARMS hog version are used to examine VFD usage across selected segments of cow-calf and hog production using means comparison tests and logistic regression analysis. The study indicates that fourteen percent of U.S. cow-calf operations used a VFD in 2018 whereas 32 percent of U.S. hog operations used a VFD in 2020. VFD use on cow-calf operations varied by operation attributes and was positively associated with having an established relationship with a veterinarian in or before 2018.

Purpose of Review: The purpose of the review is to ensure the high-quality of the economic analysis, transparent explanation of methods, objective interpretation of results, and effective communication to the intended audience.

Type of Review: [] Panel Review [X] Individual Reviewers
[] Alternative Process (Briefly Explain):

Timing of Review (Est.): Start: 2/20/2026 Completed:

Number of Reviewers: [] 3 or fewer [X] 4 to 10 [] More than 10

Primary Disciplines/Types of Expertise Needed for Review: Economists

Reviewers selected by: ☒ Agency ☐ Designated Outside Organization

Opportunities for Public Comment? ☐ Yes ☒ No

If yes, briefly state how and when these opportunities will be provided:

How:

When:

Peer Reviewers Provided with Public Comments? ☐ Yes ☒ No

Public Nominations Requested for Review Panel? ☐ Yes ☒ No