

NAHMS 2021 Feedlot study

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Abstract

The National Animal Health Monitoring System (NAHMS) conducts national studies on the health and health management of U.S. domestic livestock populations. The Health Management on U.S. Feedlots 2021 study (Feedlot 2021) is the fourth NAHMS study of the U.S. feedlot industry, with previous studies being conducted in 1994, 1999, and 2011. In the NAHMS Feedlot 2021 study, for feedlots that placed cattle not born and raised on the operation slightly over half of cattle placed (51.1%) came directly from a cow-calf operation or a stocker or backgrounder operation, while 41.2% came from a sale barn. Of the cattle placed in 2020, 85.1% were placed with the intention of meeting no specific marketing claims, 0.5% of cattle were placed to meet certified organic claims, 8.4% were placed to meet no or limited antibiotic use claims, and 10.2% were placed to meet no hormone use claims. About three-fourths (73.1%) of feedlots used antibiotics in any form in 2020. Of these feedlots: 22.4% gave injectable antibiotics to cattle as a group; 67.6% gave injectable antibiotics to sick cattle; 42.8% gave antibiotics in feed; and 4.5% gave antibiotics in water. Most feedlots (85.1%) used a veterinarian in 2020. About two-thirds of feedlots (64.2%) felt that on January 1, 2017, they had all the resources necessary to manage the Veterinary Feed Directive (VFD) rule change.

Key words: NAHMS, feedlot, USDA, monitoring

Introduction

The National Animal Health Monitoring System (NAHMS) was created by USDA in 1983 to collect, analyze and disseminate data on animal health, management and productivity across the U.S. NAHMS conducts national studies on the health and health management of U.S. domestic livestock populations. These studies are designed to meet the information needs of the industries associated with these commodities. The studies are designed to be nationally representative with random selection of feedlots for participation. The Health Management on U.S. Feedlots 2021 study (Feedlot 2021) is the fourth NAHMS study of the U.S. feedlot industry, with previous studies being conducted in 1994, 1999 and 2011.

The Feedlot 2021 study was conducted in 22 of the Nation's major feedlot states (Figure 1), which accounted for at least 70 % of all U.S. feedlot operations and 70% of feedlot cattle. Stocker and backgrounder operations were excluded as were cows and bulls being fed for the slaughter market. Of the 22 states, only large operations (1000 head and up feedlot capacity) were selected in four states, and only small operations (50-999 head capacity) were selected in five states. Both large and small operations were selected in the remaining 13 states. Large operations were oversampled, with all large operations in states with a large component being selected. Small operations were randomly selected from the National Agricultural Statistics Service's (NASS) list of feedlot operations.

Two questionnaires were administered, with NASS completing the first questionnaire between March 1 and April 30, 2021, and USDA's Veterinary Services (VS) field employees completing the

second questionnaire between June 14 through August 31, 2021. The questionnaires focused on practices used in calendar year 2020. Feedlot 2021 consisted only of two questionnaires with no biologic sampling being conducted. The Feedlot 2021 study had the following objectives:

- Describe health management practices on U.S. feedlots with 50 or more head.
- Estimate the prevalence of important feedlot cattle diseases.
- Describe antibiotic use and stewardship practices on U.S. feedlots.
- Describe trends in feedlot cattle health management practices and important feedlot cattle diseases.

Results from the first questionnaire administered by NASS will be covered here. Results from the second questionnaire will be available in 2023 and will include information about preconditioning practices for cattle prior to arrival at the feedlot, processing procedures at arrival, occurrence of BRD and other diseases, including some newer diseases seen in feedlots such as hairy heel wart, use of antibiotics by reasons for use, including specific antibiotics used, and biosecurity practices.

Results

Overall, 5342 feedlot producers were selected for participation, and 1025 producers completed the first questionnaire. There were 390 feedlots that consented to be contacted to complete the second questionnaire.

For feedlots that placed cattle not born and raised on the operation, 18.0% of cattle came directly from a cow-calf operation, 33.1% came from a stocker or backgrounder operation, 41.2% came from a sale barn, 4.4% came from a dairy operation, and 3.3% came from another source. Thus, slightly over half of cattle placed (51.1%) came directly from a cow-calf operation or a stocker/backgrounder operation, which generally produce cattle at lower risk of disease than sources such as a sale barn.

For the 85.4% of feedlots that identified any cattle with individual eartags, 90.0% of feedlots used visual-only eartags on most of the cattle, 5.7 % used RFID low frequency eartags, 1.8% used RFID high frequency eartags, and 1.8 % used ultra-high frequency eartags.

Of the cattle placed in 2020, 85.1 % were placed with the intention of meeting no specific marketing claims, 0.5 % of cattle were placed to meet certified organic claims, 8.4 % were placed to meet no or limited antibiotic use claims, and 10.2 % were placed to meet no hormone use claims.

Overall, 73.1 % of feedlots used antibiotics in any form in 2020. A higher percentage of larger feedlots used antibiotics in any form in 2020 (89.9 % of medium feedlots 500-999 capacity; 91.6 % of large feedlots 1000-4999 capacity; and 91.1 % of very large feedlots, capacity 5000 & up) compared with small feedlots (66.2% of small feedlots 50-499 capacity).

