An overview of veterinary use on U.S. goat operations as part of the NAHMS Goat 2019 Study

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Introduction
As of January 1, 2020, the U.S. goat population totaled 2.6 million head on over 136,000 operations making it a noteworthy source of milk and meat for human consumption. U.S. goat operations represent a variety of production systems including meat, dairy, angora/cashmere, brush control, and show/companion goats. Therefore, it is important to understand the current animal health and management practices in this diverse agricultural industry. This abstract focuses on veterinary use on goat operations.

Materials and methods
USDA’s National Animal Health Monitoring System (NAHMS) is a nonregulatory program within USDA APHIS VS, that was initiated in 1983 to collect, analyze, and disseminate data on animal health, management, and productivity across the U.S. In 2019, NAHMS, in collaboration with National Agricultural Statistics Service (NASS), conducted its second national cross-sectional study on the goat industry.

The NAHMS Goat 2019 study included 24 of the top goat-producing states, representing 76.6% of goat operations with five or more adult goats and 82.3% of goats on operations with five or more adult goats. Producers with five or more goats were personally interviewed by NASS enumerators from July 1st through August 9th, 2019. Data were validated and weighted descriptive estimation was carried out using SAS-callable SUDAAN software. This abstract covers select topics from the general goat management questionnaire (GGMQ) regarding veterinary use on goat operations.

Results
Overall, 60.0% (n=1,840) of eligible operations completed the GGMQ. Operators on 49.8% of operations had consulted a veterinarian for any reason related to goat health, productivity, or management. Operators on a higher percentage of large operations (59.5%) than small operations (45.0%) had consulted a veterinarian. Operators on a higher percentage of dairy operations (61.8%) than meat (47.1%) and other (46.8%) operations had consulted a veterinarian.

Of the 50.2% of operations in which a veterinarian was not consulted, operators on 82.2% indicated that the primary reason for not doing so was that a veterinarian was not needed on the operation. Very few operators indicated that they did not consult a veterinarian because none were available in the local area (1.6%), or that a veterinarian was available, but he/she was not knowledgeable about goats (6.0%).

A veterinarian-client-patient relationship (VCPR) plays an important role in animal health, and in many States, having one is required by law so that a veterinarian can diagnose and treat animals and prescribe medications. Overall, 45.4% of operators had never heard of a VCPR. Operators on a higher percentage of large operations (58.9%) had a basic understanding of the meaning of a VCPR than operators on small operations (43.2%). Operators on 22.2% of all operations described their VCPR as a formal agreement (written or verbal) with their veterinarian.

Overall, 55.1% of operations that treated any goats always kept individual animal health records. For operations that used antibiotics, 61.8% always recorded the antibiotic names, 59.1% always recorded the dates of antibiotic treatments, and 41.7% always recorded the antibiotics’ withdrawal time. More than half of operations (58.7%) that had laboratory tests conducted never recorded test results. Over a third (38.7%) of operations did not use any antibiotics in the previous 12 months. For those that used antibiotics, 10.5% of operations usually used a veterinarian to determine antibiotic withdrawal periods.

Significance
This study provides beneficial information to the goat industry, small ruminant practitioners, and goat researchers. These results benchmark current use of veterinarians on goat operations to identify areas for education, outreach, and research to help veterinarians and producers work together to improve goat production.