

Collaborative Development of a National Veterinary Accreditation Module on “The Veterinarian’s Role in Microbial Preharvest Food Safety”

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Background

The National Veterinary Accreditation Program (NVAP) is administered by the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS). NVAP accredits and thus authorizes private veterinarians to perform certain official regulatory functions on behalf of the United States or individual states. NVAP’s mission is to provide accredited veterinarians with the information they need to ensure the health of the Nations’ livestock and animal population and to protect the public health and well-being. Accredited veterinarians may be private practitioners or veterinarians employed in academia, industry, military, research, or other fields. Over 70,000 accredited veterinarians perform tasks to control and prevent the spread of animal diseases throughout the United States and internationally.

Accreditation is granted on a three-year renewal cycle. Accreditation renewal requires that veterinarians complete APHIS approved supplemental training to maintain accreditation status. NVAP modules are delivered during in-person presentations or online at the NVAP website. Over 30 online modules are currently available on a range of subjects, including the Veterinary Feed Directive, animal disease traceability, and a variety of species-specific topics. Although the modules are designed for use by accredited veterinarians, they are publicly available at the NVAP website.

Food-animal producers; meat, poultry, egg, and dairy food industries; and public and animal health partners share a common goal: to provide safe and nutritious food for consumers. Factors contributing to foodborne illnesses occur at every step of the farm-to-fork continuum, including the farm, harvest and processing operations, distribution, retail, and consumption. Veterinarians have an important role in recognizing and mitigating microbial foodborne illness hazards in the preharvest setting. Providing veterinarians education about preharvest practices that may affect food safety is intended to help prevent human illnesses by reducing the pathogen burden of animals sent to harvest.

The idea for a USDA-APHIS NVAP microbial food safety module for veterinarians grew from recent food safety challenges and from recent industry-government collaborative preharvest efforts.

Methods

A group of individuals representing industry associations, veterinary associations, state and federal agencies, and other allied entities formed a private-public workgroup to collectively propose and develop an NVAP training module. The goal of this collaboration and the module was to increase awareness among accredited veterinarians that preharvest factors can affect food safety and to promote on-farm strategies to reduce pathogens causing human foodborne illness, thereby protecting the national food supply.

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Results

This NVAP module's scope is limited to preharvest microbial hazards in animal products. The objectives of this module are for veterinarians to:

1. Recognize human foodborne illness hazards and the potential impact of preharvest practices on food safety;
2. Understand how human foodborne outbreaks are detected, investigated, and traced to source food vehicles; and
3. Reduce human foodborne illness hazards by learning and implementing model preharvest food safety practices.

Key topics included in the module are preharvest microbial food safety hazards, investigating foodborne outbreaks, model practices for preharvest food safety for swine, beef, dairy products, poultry, and eggs and egg products.

This module will provide valuable resources and education for accredited veterinarians to help producers continue to raise healthy animals. Improving the health of food animals leads to safer food and protects public health. The module is expected to be completed in 2023.

An extensive workgroup of members representing human and animal health, food production and safety, industry, veterinary associations, state and federal agencies, and other allied organizations is an example of a collaborative effort to recognize and address a shared responsibility and goal in food safety and One Health.

Conclusions

Recent food safety challenges led academic-industry-government collaborative groups to recognize the need for additional training in preharvest food safety. The creation of this NVAP module is a result of a successful private-public coalition to create preharvest food safety training for veterinarians. The module will promote preharvest food safety, helping to decrease foodborne illness, a shared goal for all stakeholders. The industry-government partnerships developed in this effort can be leveraged for future collaborative projects to promote One Health.

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