



STEWARDSHIP ACTIVITIES RELATED TO COMBATING ANTIBIOTIC RESISTANT BACTERIA

APHIS REPORT

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SURVEILLANCE, PREPAREDNESS AND RESPONSE SERVICES
U.S.D.A., ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES



Investments

Three Major Areas of Investment within the APHIS Program Unit

- ❖ National Animal Health Monitoring and Surveillance
- ❖ National Veterinary Services Laboratories/National Animal Health Laboratory Network
- ❖ National Veterinary Accreditation Program

National Animal Health Monitoring and Surveillance

Antimicrobial Use Surveys



❖ Swine

- ❖ The potential respondent universe of the study is sites in 13 states with 1,000 or more nursery pigs or grower-finisher pigs.
- ❖ This survey is limited to operations with 1,000 or more pigs because these operations in these 13 states account for 88.2% of total US pig inventory.
- ❖ Only operations with nursery pigs or grower-finisher pigs are eligible because the vast majority of antimicrobial use occurs in this class of pigs.

National Animal Health Monitoring and Surveillance

Antimicrobial Use Surveys

- ❖ Feedlots
 - ❖ Feedlots in 22 States will be surveyed
- ❖ Veterinary Services epidemiologists currently conducting surveys (July-September 2017)
- ❖ Data collection focuses on 2016 prior to VFD rule
- ❖ Focus on use and stewardship



National Animal Health Laboratory Network (NAHLN)

Pilot project design finalized for implementing AMR monitoring in veterinary diagnostic labs

- ❖ Year 1 of the pilot project FY 2018.
- ❖ Antimicrobial susceptibility (animal pathogen testing)
 - ❖ E. coli, Salmonella spp., Staphylococcus intermedius and Mannheimia haemolytica
 - ❖ Cattle, swine, poultry, horses, dogs and cats
 - ❖ Target at least 3000 samples across all laboratories
- ❖ Reports will be generated to inform veterinary practitioners
 - ❖ Influence prescription / stewardship behavior

National Veterinary Accreditation Program (NVAP)

❖ NVAP Module 23: Use of Antibiotics in Animals (2012)

- ❖ Completed over 21,900 times by accredited veterinarians
- ❖ (G7) meeting in Germany in 2015, Module 23 was one of only two “Best Practices of Combating Antimicrobial Resistance” from North America

❖ NVAP Module 29: Veterinary Feed Directive (2017)

- ❖ Completed by over 4,000 accredited veterinarians, and quickly became the most viewed module in NVAP’s training suite in early 2017
- ❖ “Agriculturalist” users exceeds veterinarian audience three-fold (feed manufacturers, feed mill owners/operators, feedlot personnel, and livestock producers)

Our Focus

Contact Us

Program Overview

Animal Disease Information

Emergency Management

Export from the U.S.

Import into the U.S.

Epidemiology

Laboratory Information Services

Monitoring and Surveillance

One Health

OIE International Standards

Traceability

Training and Development

Veterinary Accreditation

NVAP Reference Guide

Veterinary Services Process Streamlining (VSPS)

Veterinary Biologics

NVAP Training Modules for Accreditation Renewal and/or RACE-Approved CE Credit

Last Modified: Aug 3, 2017



Twenty (20) modules, highlighted below, now provide no-cost, RACE-approved, CE-credit certificates (available to veterinarians, veterinary technicians, or the general public). The remainder should be available by September 30, 2017.

NVAP Training Modules are available in three formats:



1. Lectures at [Upcoming Veterinary Conferences](#)
2. PDF/USB at [Training Modules Order Form](#)
3. Online as follows:

For RACE-approved CE-credit only, proceed to the bottom of the page and select the title of the training module link you wish to complete.

For accreditation renewal, carefully read the following:

1. You must know your 6 digit National Accreditation Number (NAN) to access each module Certificate of Completion. If you do not know your NAN, please contact your local [NVAP Coordinator](#) .
2. You must retain your Certificate of Completion.
 - The information contained on the certificate will be needed for accreditation renewal when you submit your application.
 - Keep your Certificate of Completion forever. You may be requested to display your Certificate of Completion during periodic training audits.
 - At the conclusion of each module, be prepared to print your Certificate of Completion or save it in PDF format to a secure file.
3. Category I Accredited Veterinarians must complete 3 units of AAST anytime within their three-year renewal period to renew their accreditation. Similarly, Category II Accredited Veterinarians must complete 6 units of AAST anytime within their three-year renewal period.

Judicious Use and Antimicrobial Stewardship

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Judicious use of antimicrobials in both humans and animals is critical to slow the development of [AMR](#). The National Action Plan document emphasizes antibiotic stewardship, defined as a “commitment to always use antibiotics appropriately and safely—to use *the right antibiotic at the right time at the right dose for the right duration.*” Antimicrobial stewardship programs focus not just on AMR but on the “bigger picture” of antimicrobial use. They aim to optimize clinical outcomes while minimizing unintended consequences of antimicrobial use, including resistance.

It is important for veterinarians to work with livestock producers and companion animal owners to avoid unnecessary or inappropriate use of antibiotics in animals. In veterinary medicine, selecting the proper antibiotic and treatment regimen is only one part of a comprehensive animal or herd health plan. To prevent disease, other strategies should be implemented such as appropriate husbandry and hygiene, strict biosecurity, routine health monitoring, and vaccination. To control disease, management changes should be considered in addition to antibiotic use. Whenever antibiotics are considered, their use should be confined to cases in which treatment is likely to positively alter the disease outcome since any antimicrobial use can result in selection for resistance.

Understanding and implementing antibiotic stewardship programs is key for all veterinarians and agricultural stakeholders to advance the appropriate use of antibiotics in all animals and minimize the development of AMR.

[Sources](#)

Antibiotic Stewardship

“Using the right antibiotic at the right time at the right dose for the right duration.”

The White House National Action Plan for Combating Antibiotic-Resistant Bacteria, 2015.

[Image Description](#)

Introduction to the Veterinary Feed Directive

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As of January 1, 2017, all water-soluble, medically important antimicrobials administered to food producing animals in drinking water require a veterinary prescription, and all medically important antimicrobials administered to food producing animals through feed require a VFD. In this module, we will only cover medically important antimicrobials administered to food producing animals through feed that require a VFD.

Watch a VFD overview video from the U.S. Food and Drug Administration (FDA) below, then continue through the module to learn more.



U.S. Food and Drug Administration
Available at the [FDA website](#)

USDA

