

# California's Antibiotic Program: 2 years of progress



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Antimicrobial Use and Stewardship

California Department of Food and Agriculture



# Overview



- I. Antimicrobial Use and Stewardship Program
- II. Review of the Use Limitations
- III. California Program Highlights
  - a. What makes California Different
  - b. Key Program Products Produced
  - c. Antimicrobial Stewardship Goals
  - d. Features of the Judicious Use
  - e. Animal Health and Disease Prevention
- IV. Future Directions of AUS Program
- V. Questions and Comments

# Antimicrobial Use and Stewardship Program



- A CDFA Program established to implement Food and Agricultural Code 14400-14408 [a.k.a. Senate Bill 27 (Hill, 2015) or SB 27]
- Assess, educate, and enforce law relating to antimicrobial use for livestock
- Gather California data on:



Use of medically important antimicrobial drugs (MIADs)



Animal management practices and health outcomes



Trends in antimicrobial resistance



Sales of medically important antimicrobial drugs

- Information collected by AUS is then used to develop recommendations and guidelines that will inform California livestock producers and veterinarians on antimicrobial stewardship



# Limitations of Use *(effective January 1, 2018)*



- Permitted when deemed necessary by the professional judgement of a California licensed veterinarian
- For treatment, control or, in some cases, prevention of disease
  - *Necessary to treat a disease or infection*
  - *Necessary to control the spread of disease or infection*
  - *Necessary in relation to surgery or a medical procedure*
- **Necessary for prophylaxis to address an elevated risk of contraction of a particular disease**
  - Not administered in a regular pattern
- Requires a valid **veterinarian-client-patient-relationship (VCPR)**
  - as defined by [California Code of Regulations Title 16, Section 2032.1](#)



**At the same time: Federal restrictions on feed and water MIADs  
CA Veterinarian CE requirement: SB 361 (2015)**

# What makes California different?



- **Stewardship program:** opportunity to reduce exposure to antimicrobials by focusing on key animal health challenges, with the aim of reducing the development of resistance
- **Diverse data picture:** not only sales data; collecting and monitoring a more complete data including clinical indication, husbandry practices, and resistance trends



# Key Program Products Produced



## What information is gathered?

- Voluntary data gathered from producers
  - By In-house Surveys
  - By University Contractors
- Snapshots as well as long-term trends that occur over years
- Includes data such as pre-VFD/water federal restriction and pre-CA law
- All information collected is held confidential, protected by law
- Geographic & operation size distributions aligned with NASS study estimates
- National Collaborations - State University Experts, NAHMS Goat Study, etc.



# Key Program Products Produced, *cont.*



- Regulations for sale of CA-regulated MIADs
- Timely access to veterinary treatment
  - Identify 'rural' areas with limited access to veterinary care
  - Consult with producers and licensed veterinarians for strategies
    - Youth Agricultural VCPR Model
  - Veterinary Medicine Loan Repayment Program (VMLRP)
- Principles of Antimicrobial Stewardship
- Judicious Use Guidelines (Producer & Veterinarian)
- Reports
  - Annual Report to be published Fall 2019
  - Summary Report: Veterinary Feed Directives 2017-2019 Q1
  - Legislative Report published January 2019



## Antimicrobial Use and Stewardship (AUS) Program Report to the Legislature



California Department of Food and Agriculture

January 2019

# Antimicrobial Stewardship Goals



- ***As little as possible*** - Reduce the need for antimicrobial drugs with infectious disease prevention
- ***As much as necessary*** - Use antimicrobials appropriately to **optimize livestock health and minimize selection for antimicrobial resistance**

## AUS Principles of Stewardship



Commitment to Partnership



Animal Health and Disease Prevention



Judicious Use of Antimicrobials



Record, Reevaluate, and Report



Expertise in Antimicrobial Stewardship

# Judicious use

is the prudent and effective use of antimicrobial drugs once you have decided to use them.



## AUS Judicious Use Guidelines

- Veterinary and producer versions
- Visual guide available here today!

## Judicious Use of Antimicrobials

Available for download: <https://www.cdffa.ca.gov/AHFSS/aus/Stewardship.html>



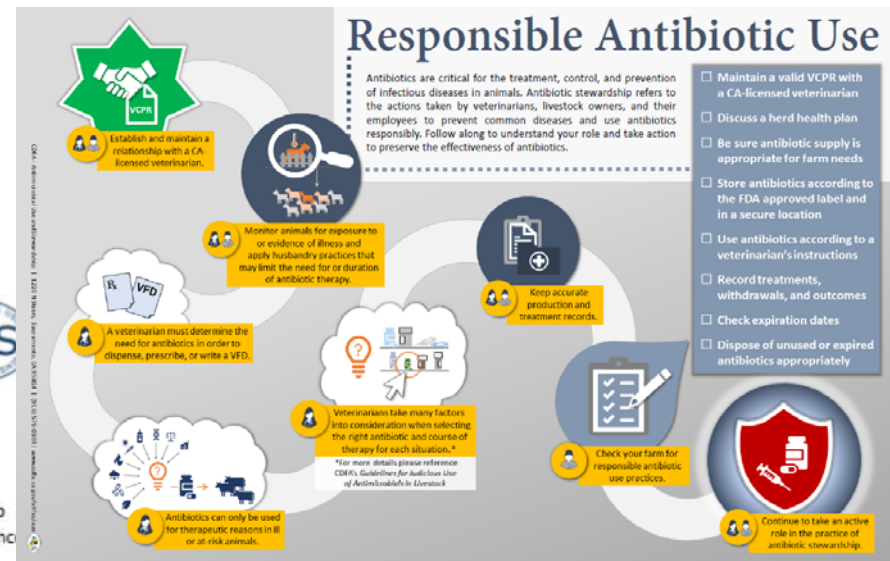
### Guidelines for Veterinarians: Judicious Use of Antimicrobials in Livestock

The practices and protocols developed and implemented by veterinarians, livestock owners, and personnel responsible for animal care are critical to the promotion and maintenance of animal health and welfare, the conservation of animal resources, and the protection of public health.<sup>1-3</sup> Established biosecurity and therapeutic recommendations include:



### Guidelines for Judicious Use of Antimicrobials in Livestock

The core foundation for antimicrobial stewardship and judicious use of antibiotics in livestock is an effective relationship between a veterinarian and livestock owners. Biosecurity and herd health plans developed and revised under the guidance of a veterinarian are vital to maintain productivity, animal health and welfare, as well as a safe and secure food supply. Livestock owners, and their employees responsible for animal care, play a critical role in the success of a herd health plan. Recognizing early signs of illness in animals, such as slight changes in behavior, requires skill and experience, and it



# Features of Judicious Use Guidelines



- Consider and draw upon the tenets of other foundational documents outside our program affecting a veterinarian's use in California and acts as a complete resource packet for beginning to examine judicial use examples including:

- **Compliance Policy Guide 615.115:**  
Extralabel Use of Medicated Feeds for Minor Species

- **Title 21, Code of Federal Regulations, Part 530:**  
Extralabel Drug Use in Animals

- **Title 16, California Code of Regulations, Section 2032.1:**  
Veterinarian-Client-Patient Relationship



# Animal Health and Disease Prevention



**Animal Health and  
Disease Prevention**

- **Informational results direct the focus and priorities of AUS Work Groups**
  - Species-Specific Expert Task Forces made of university and industry leaders
  - Literature reviews focused on the top 3 California-producer identified conditions for administration, by production type
  - An educational approach for future materials
- **Address trends across**
  - Differing needs by operation characteristics
  - Veterinary involvement
  - Recording tools and materials
- **Informed reduction strategies: not based on artificial targets**



# Future Directions of AUS Program



- Analysis of the data on-going: continuing to conduct studies, information analysis can be used to help refine recommendations
- Pilot antimicrobial resistance assessment efforts for on-farm trends
- Funnel information directly into stewardship efforts
- Going beyond the traditional Quality Assurance program?
  - Disease focused workshops
  - Partnering with local veterinarians
  - Useful tools and record keeping resources
  - Continued partnership with universities and livestock groups
- VFD and sales enforcement- Inspection Services
- California Veterinary Medical Board responsible for enforcing veterinary practice law



# Thank you!



Please contact us if you have any questions, comments, or suggestions!

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## Antimicrobial Use and Stewardship Contact Information



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