



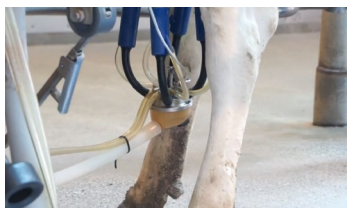
# CDQAP Quality Assurance Update - February 2023

## Drug Use on Farms Still in National Spotlight

**Producer's wanting to reduce antibiotic use should consider Selective Dry Cow Therapy, but it won't be for everyone.**

*By Dr. Michael Payne, UC Davis, School of Vet. Medicine; Director, CDQAP*

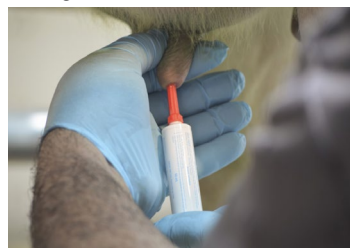
Since the 1940s, as human medicine's dependence on antibiotics has accelerated, so has bacterial pathogens' ability to resist those treatments. The [Centers for Disease Control](#) estimates that every year about 2.8 million Americans develop antibiotic resistant infections, with some 35,000 of them dying from it.



This crisis in human health has spurred millions of dollars of research and mitigation programs. In California for instance, every human hospital and nursing home must implement a plan describing how the facility will minimize development of antibiotic resistant strains.

**Focus on Antibiotics in Livestock** – Efforts have also been made to slow the development of resistance in livestock and poultry. Implemented in 2013, [FDA's strategy](#) required veterinary oversight of antibiotics used in feed and water, and also prohibited using antibiotics to increase weight gain and production. In 2018, California led national efforts to further reduce resistance by requiring all antibiotic use in food animals to be overseen by a veterinarian. In June of this year, [federal regulations](#) will mimic California's legislation, requiring veterinary antibiotic management in all 50 states.

**Focus on Dry Cow Treatments** – Most antibiotics sold for use in food animals are administered in feed or water, a practice that, for milk quality reasons, isn't used in dairy cows. Similarly, the use of dry and lactating intramammary treatments accounts for [less than 1% of all antibiotics](#) given to animals. There is [no data](#) suggesting dry cow treatment promotes development of significant resistance. The combination of dry and lactating treatments does however remain the most common antibiotic use on dairies, making it a potential target for legislation.



In 2021, Maryland [prohibited](#) the use of Blanket Dry Cow Therapy (BDCT), meaning routine treatment of all quarters in all cows at dry-off. Under the new regulation, any cow receiving dry-treatment must

Continued on Page 2

## Start preparing now! Manure Management Funding Coming in Spring

Beginning this spring CDEA will offer millions of additional dollars of "Climate Smart" grants to California producers through USDA funding secured by its partnership with the California Dairy Research Foundation and the CA dairy industry. The new "Dairy Plus" grant program will provide financial assistance to adopt advanced manure management practices that reduce both methane emissions and nitrogen surplus. Go to [CDRF's Climate Smart webpage](#) to learn more about the program and sign up for funding alerts.

## Who is the Animal Agriculture Alliance? Part One: Connecting Farm to Fork

*By Kylie Scott, Communications Intern,  
and Abby Komegay, Manager, Issues and  
Engagement, Animal Agriculture Alliance*



*Editor's Note: The Alliance supports the dairy industry.*

*Members include producer, processor and trade organizations at the local, state, and national level.*

The Animal Agriculture Alliance is a 501(c)(3) nonprofit organization committed to bridging the gap between farm and fork. Formed in 1987 in the Washington, DC area, the Alliance works to provide a unified voice for farmers, ranchers, veterinarians, feed companies, processors, allied associations and others along the supply chain. Their motto is simple: connect, engage, protect. In this first issue of a three-part series, the Alliance will demonstrate how they fulfill their mission to connect key food industry stakeholders to arm them with responses to emerging issues.

The Alliance is committed to bringing everyone across the food chain to the table for good. Its membership is a diverse mix of individuals, corporations and associations representing producers, processors, suppliers, scientists, veterinarians and more. Active committees are one way the Alliance helps connect stakeholders with a vested interest in animal agriculture and food production. Whatever the hot-button issue, the Alliance communications team monitors media and online conversations, relays information to members and develops strategies to address the topic through the Issues Management Committee.

The Alliance champions the industry's future by connecting online with supporters through the [Animal Ag Allies](#) program and the [College Aggies Online](#) scholarship competition. These two programs empower

Continued on Page 2

## Drug Use on Farms Still in National Spotlight *continued*

first be diagnosed as having an infection, using a test method approved by the state's Secretary of Agriculture. New York has a similar draft legislation.

**Blanket Dry Cow Therapy** – BDCT programs became standard practice in the 1970's when contagious pathogens like *Strep agalactiae* and *Staph aureus* were a common challenge for producers. Blanket therapy's effectiveness explains its persistence in most dairy's mastitis control programs today; more than [94% of large dairies](#) still use blanket dry cow treatment. Consequently, dry treatment accounts for about 40% of all antibiotic treatments used on dairies. Because cull cows and heifers are not typically treated, not all cows on the dairy are treated.

**Selective Dry Cow Therapy** – Infections by contagious mastitis pathogens are far less common than in previous decades. Selective Dry Cow Therapy (SDCT), treating only those cows or quarters with evidence of infection, has the potential to reduce antibiotic use and possibly even treatment costs. [Numerous studies](#) have compared blanket versus selective dry cow therapy. Collectively this research provides important guidance for producers considering SDCT:

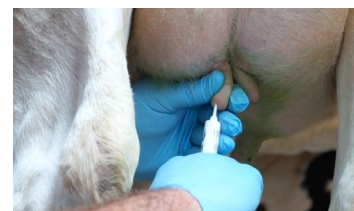
- SDCT does reduce use of antimicrobials on the dairy, typically something in the range of 30% and 60%, depending on the program.
- SDCT can result in [modest savings](#) of treatment costs, with one [model](#) with estimating savings of between 30 cents and \$2.30 per cow.
- Use of internal teat sealants, such as Orbeseal® or Lockout®, in untreated quarters is essential for the success of a SDCT program.
- SDCT can be effective for some operations, but proper selection of herds is critical to prevent potential mastitis surges.

**Selecting Cows for SDCT** – Perhaps the thorniest question for producers implementing SDCT is how to determine, accurately and economically, which cows to treat. Some dairies have had great success setting up On-Farm Culture programs for quarter milk samples. Such programs do however have associated material and labor costs. In addition, there may be up to a 40% false negative rate, resulting in undertreatment of subclinical infections.

[Recent studies](#) demonstrate that a selection algorithm incorporating monthly SCC data and clinical mastitis history can be as effective as culture in determining which cows need to be treated. For the more than half of California dairy herds already using monthly testing, such an algorithm could be an economical solution. Alternatively, producers using robotic milkers may have real-time access to SCC through sensor data. Finally there may be some commercially available on-farm SCC test kits that could be used, but the accuracy of those assays has yet to be determined.

**SDCT Isn't for Everyone** – Not every herd is ready for SDCT. [Typical recommendations](#) for good candidates for a SDCT program include:

- herds that have eliminated *Strep agalactiae* and *Staph aureus*
- herds that routinely culture bulk tanks and have a Bulk Tank SCC of less than 250,000
- herds with a clinical mastitis incidence rate of less than 5% per month
- herds that forestrip and that have with good clinical mastitis records



## Who is the Animal Ag Alliance? *continued*

farmers, ranchers, dietitians, veterinarians, industry professionals and college students to become proactive and confident communicators for animal ag. College Aggies receive nine interactive and educational weeks of content to help them become effective communicators with guidance from industry mentors. In the 2022 competition, participants represented 37 states and 66 universities. Over the course of the competition, students' posts about agriculture generated more than 8.5 million impressions on social media. Similarly, Animal Ag Allies is an initiative that empowers industry participants to be outspoken advocates for agriculture online and within their communities. Graduates of Animal Ag Allies are on the front lines of responding to emerging issues and sharing positive content about animal agriculture. The [deadline to enroll](#) in the next class of Allies is Saturday, March 4, 2023.

Another key project for the Alliance is the annual Stakeholders Summit, which unites industry leaders across the supply chain to discuss critical issues and generate new ideas. The conference is an opportunity for farmers, ranchers, processors, association members and anyone who has a vested interest in the production of meat, poultry, milk and eggs to connect with fellow industry stakeholders. This year, Animal Agriculture Alliance's 2023 Stakeholders Summit is set for May 4-5 in Arlington, Virginia and will be themed "Partners in Progress: Building a Sustainable Future for Animal Ag!" Registration for Summit is now open, so be sure to [save your seat!](#)

In addition to hosting its own event, Alliance staff delivers dozens of presentations throughout the country every year. If you have an upcoming meeting or conference, check out their Speakers Bureau [here](#).