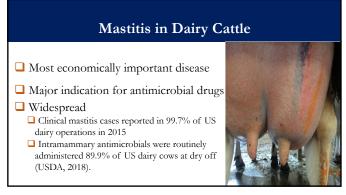
Dry Cow Therapy Selective Treatment Strategy for Reduced Antimicrobial Drug Use Emmanuel Okello University of California, Davis LPELC Webinar, August 2021 LUNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

1



2

Multiple prevention & control strategies: Vaccines against coliforms and Staphylococcus aureus Good milking practice Dry Cow Therapy Since 1970 - five points of the Mastitis Control. MANAGEMENT

3

Dry Cow Therapy Strategies

Aim is to treat subclinical infections at the end of lactation and new infections during the period. Two strategies:

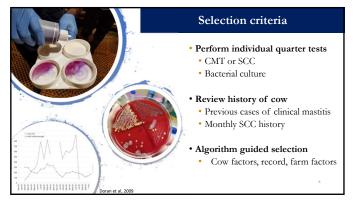
- ☐ Blanket dry cow therapy (BDCT)- Treat all cows at dry-off
- ☐ Selective dry cow therapy (SDCT) Treat cows with subclinical infection

1

Benefits of SDCT

- ☐ Can decrease antibiotic usage
- ☐ Economic benefits
- Should be carefully applied in selected herds
 - BTSCC <250,000 cells/mL
 - Good records
 - Free of contagious pathogens

5



6

The archived presentation is available at: https://lpelc.org/archived-webinars/

Randomized Clinical Trial					
Groups	1	2	3	4	
	АВ	ABT & 1TS	ITS	NONE	
·	□ Both □ Inter	mammary a (AB+ITS) rnal teat sea e (control g	lants (ITS)	•	B)

7

Randomized Clinical Trial				
	1	2	3	4
	IMM	IMM & TS	TS	NONE
Mastitis: OR	22% 0.87	18% 0.72	22% 0.97	23% Ref

8

Randomized Clinical Trial					
Risks for mastitis during 150 DIM					
Factors	Odds Ratio				
Jersey breed	0.61		M		
Parity at enrollment ≥ 3	1.65		0		
Teat end score \geq 4 for 2+ quarters	2.67				
CMT score of 3 for ≥1 quarter	1.54				

9

- .	
Lessons	Darnt

- ❖ Cows ≥ 3rd lactation had higher odds of clinical mastitis, culling by 150 DIM, and new bacterial infection
- Cows with higher teat end scores or CMT at dry off had higher odds of developing clinical mastitis during the first 150 DIM.
- Cows with history of clinical mastitis in the enrollment lactation had higher odds of culling up to 150 DIM in the following lactation.
- Cows enrolled in the summer season had higher odds of culling and lower odds of developing new bacterial infections.

10

Thank you

Questions?

11