

# Minnesota DHIA News

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## DHIA Scholarship Application Now Available

**Applications are due by November 30<sup>th</sup> 2020**

The application and guidelines are available by visiting [mndhia.org](http://mndhia.org)

### ***Selective Dry Cow Therapy (SDCT) Report is here!***

#### ***What is selective dry cow therapy (SDCT)?***

Selective dry cow therapy (SDCT), as opposed to blanket dry cow therapy (BDCT), employs a specific strategy to avoid treating every cow with antibiotics at dry off.

- BDCT accounts for approximately one-third of the total antibiotic use on a conventional dairy.
- SDCT can provide a more targeted approach and a more judicious use of antibiotics without compromising future cow health or performance.
- SDCT programs identify two categories of cows:
  1. Cows eligible for treatment with antibiotics and internal teat sealant.
  2. Cows eligible for treatment with internal teat sealant alone.

#### ***Why should producers consider SDCT?***

Increasing public concern about antibiotic use in agriculture has led the dairy industry to explore ways to use antibiotics in a more judicious manner.

- BDCT accounts for approximately one-third of the total antibiotic use on a conventional dairy farm, and SDCT has been shown to reduce dry cow antibiotic use by 55%.
- Decreased use of antibiotics also means that producers have the opportunity to save money with a SDCT program.
- A cost-saving calculator is available through the UMN College of Veterinary Medicine dairyKNOW website (<https://dairyknow.umn.edu/research/udder-health/selective-dry-cow-therapy-cost-calculator/>).

#### ***What dairy farms have the best chance of SDCT success?***

SDCT is not the correct choice for every producer. Specific herd criteria help identify when an SDCT program is most appropriate to implement and include:

- An annual bulk tank somatic cell count (SCC) less than 250,000 cells/ml.
- Contagious mastitis pathogens are under control (low numbers of *Staphylococcus aureus* and *Streptococcus agalactiae*).
- Use of teat sealant in all quarters of all cows at dry off.
- Correct technique for intramammary infusions at dry off.
- Well-trained personnel to make correct screening and treatment decisions.
- The ability to monitor the program to verify it is working.

## ***How to identify which cows to treat with antibiotics in a SDCT program***

There are two approaches to classify cows in a SDCT program, an algorithm guided method, and a culture guided method. Herds that routinely test with DHIA or have access to similar data can use an algorithm guided method to categorize cows. Those herds without access to reliable SCC and clinical mastitis records may need to use a culture guided method.

- Algorithm guided and culture guided SDCT programs both show a similar reduction in dry cow therapy antibiotic use.
- There is no difference in effectiveness between the two methods in terms of significant cow health or production outcomes according to a multi-herd, multi-state study led by University of MN researchers (Rowe, et al, 2020).
- While both approaches had a positive average net return, there is potentially a greater cost-savings associated with an algorithm guided SDCT program if adequate DHIA records are already available.

## ***What cows are eligible for the two treatment groups in an SDCT program?***

### **Algorithm guided SDCT**

Specific criteria have been developed to identify the two groups of cows in an algorithm guided SDCT program.

<b>Cows eligible for treatment with antibiotics and internal teat sealant in all four quarters (meet ANY or ALL criteria)</b>	<b>Cows eligible for treatment with internal teat sealant alone in all four quarters (meet ALL criteria)</b>
SCC greater than 200,000 at any test during the current lactation	SCC less than 200,000 for all tests during the current lactation
Any clinical mastitis cases in the last 14 days of lactation	No clinical mastitis in the last 14 days of lactation
2 or more clinical mastitis cases during the current lactation	Less than 2 clinical mastitis cases during the current lactation

**Culture guided SDCT is the other option and will be discussed next month.**

## ***How to monitor a SDCT program***

As with any big decision on a dairy, it is crucial to work with the herd veterinarian to monitor and evaluate the program. An ideal monitoring program includes continual evaluation of milk quality and the SDCT program:

- Regular bulk tank cultures to screen for contagious pathogens.
- SCC testing.
- Routine culture of clinical and chronic mastitis cases.
- Monitoring cows for mastitis during the dry period, particularly just after dry off.
- Monitoring clinical mastitis rate and SCC in early lactation
- Veterinary involvement and evaluation of records.
- For herds using the culture approach, monitor the cleanliness of samples, since a high contamination rate will result in unnecessary use of antibiotics, reducing the net-return of the program.

## ***Keys to success***

Successful SDCT programs are highly dependent on a few key factors.

- Use of an internal teat sealant in quarters not treated with dry cow antibiotics
- A proper intramammary infusion technique is essential. Failure to follow aseptic technique can result in the introduction of harmful pathogens to the udder. Well trained, vested employees are crucial.

- Veterinary involvement is strongly encouraged to help set protocols, train employees, and monitor the program. In some cases the herd veterinarian could also provide trained, experienced veterinary technicians to do sampling and/or to conduct dry-off procedures.
- SDCT is not something all herds should implement. Producers should work with their veterinarian to make sure an SDCT program is right for their herd using the appropriate herd criteria.

### ***DHIA can help***

Starting in November 2020, Minnesota DHIA will provide a selective dry cow therapy report to eligible herds. The report is the result of collaboration between Minnesota DHIA and University of Minnesota SDCT researchers.

- The DHI-370 Flex Report will include cows to dry off in the next 45 days and will highlight potential candidates for internal teat sealant alone.
- The producer will be responsible for checking the candidate cows for a history of clinical mastitis and that would make them ineligible for treatment with internal teat sealant alone.
- Herds eligible for the report should meet the following criteria: 8 or more DHI test days with SCC data, an annual DHI herd average SCC less than 250,000, and less than 3 DHI herd tests with average SCC greater than 250,000.
- For more information contact Minnesota DHIA 763.682.1091

Thanks to Joe Armstrong for this article, and to Sam Rowe, Erin Royster, Sandra Godden and other good folks at the University of Minnesota for their contributions and their research.



We hope your family enjoys a happy and plentiful Holiday Season. Stay Safe, the world needs you and so does your community. The bounty on many tables is due to your great work.

### **Fat plus Protein pounds Calculation found on the Condensed Report**

BarnName	DIM	Peak Milk	Last Milk	Test Milk	Pct Fat	Pct Pro	Lbs F+P
Y1396	198	124	109	75	3.1	3.2	4.7
Y1397	163	115	106	106	3.1	2.9	6.4
Y1400	142	115	106	100	2.9	2.6	5.5
Y1401	119	124	106	106	3.3	3.0	6.7

Category	Num Cows	DIM	Peak Milk	Last Milk	Test Milk	Pct Fat	Pct Pro	Lbs F+P
All	217	181	117	91	93	3.8	3.1	6.3
Milking	183	164	118	95	93	3.8	3.1	6.3
1st	82	184	107	87	86	3.7	3.1	5.8
2nd	63	154	127	103	98	3.7	3.1	6.6
3+	38	138	130	101	102	4.0	3.1	7.1

### **Annual Summary Update**

The Minnesota DHIA Board of Directors has decided that for the calendar year 2020, due to the disruptions caused in many herds by the corona-virus, herds will need to have 10 tests in the calendar year in order to be published. This applies equally to electronic meter, robot, and traditional tests.

**October Milk Quality Leaders, Ranked by SCC, then Log SCC**

<b>Producer Name</b>	<b>SCC</b>	<b>Cows</b>	<b>Producer Name</b>	<b>SCC</b>	<b>Cows</b>
HARMONY HILLS DAIRY	37	64	TRAIL SIDE HOLSTEINS	77	652
SHIR-MAN HOLSTEIN FARM	37	62	*DUANE&KAREN TIMM	77	102
*DARRICK HEITMAN	37	4	MILLER DAIRY	77	57
*LESTER DONNA BANSE	40	147	J&J DAIRY	78	71
HOEFS' DAIRY	42	285	DANINGER INC	78	81
*MAREN & JEREMY HOLST	42	140	*STEVE MARTIN	79	48
*BRANDON + JILL MARSHIK	44	94	PETERM&LYNN HENDRICKSON	79	111
JOHNSON DAIRY	45	100	BREEZY WILLOWS FARM	79	39
*MICHAEL & KRIS BANSE	46	104	KRAIG&RACHELLE KRIENKE	80	566
BEAVER OAK DAIRY	47	144	*PETER+DAVID BURFEIND	80	348
*RYAN KNISLEY	48	61	KARA-KESH HOLSTEINS	80	6
WOLF CREEK DAIRY	49	459	MARSHALL KORN	80	59
BURKE DAIRY INC	49	181	*MITCH MEHRWERTH	81	61
MERDAN DAIRY INC	49	78	*RODNEY RAY	82	55
*ADAM & SARAH MELLGREN	49	66	PRIGGE FAMILY FARM	82	288
WHITE-AKER PASTURES	51	8	SASS FARMS	82	259
*FRANCIS & THERESA RYNDA	52	51	RADERMACHER DAIRY LLC	82	226
KIMM'S DAIRY	53	89	*JERRY & BEV POHLMANN	83	69
SELKE FARMS	54	247	*MIKE AND DONNA TELLERS	83	53
*BRIAN & JULIE LIBBESMEIER	54	69	RICK & SHARI WEIR	84	69
*BILL & ALAN MILLER	56	276	HEMMESCH DAIRY INC.	84	123
*DEVOINE KRUSE	56	234	*SCOTT FEINE	84	77
STARLIGHT ACRES	56	6	SCHEFFLER DAIRY	85	145
CRONK DAIRY	57	35	MID LANE DAIRY	85	24
RIVER VALLEY DAIRY LLC	58	103	METOGGA LAKE DAIRY LLC	86	437
HOUDEK DAIRY LLC	60	431	KELLER DAIRY	86	122
*DENNIS AND WAYNE WOLTERS	60	151	CLEAR CREST FARM,LLC	87	782
*JAMES C PFEIFER	61	51	*KEN & LINDA GLISCZINSKI	87	239
GREGORY DAIRY LLC	62	93	RYBERG REG HOLSTEIN	87	42
*JAMES & BETH OLSON	62	46	GLEN & BECKY CHRISTEN	87	40
SUNNY SIDE DAIRY	62	131	*SCOTT&MICHELLE HERBER	88	716
HOFFMAN NORTH-CREEK	63	469	THISTLE DEW DAIRY	89	130
ACKERMAN FARMS	63	108	*JACK SCHOUWEILER	89	32
HAPPKE HOLSTEIN FARM	65	111	NAMES DAIRY	89	101
KUECHLE DAIRY	65	248	MUNDT DAIRY	90	209
RUSSELL J WIRT + FAMILY	65	548	TURNER DAIRY LLC	93	173
GEHL ACRES FARM	66	140	BLUE VIEW DAIRY FARM	94	287
JOHNSON DARREN+LYNN	66	232	TWIN SPRUCE	94	88
*DEAN RAUSCH	66	74	MARSHLAND FARMS	94	104
*JEREMIAH SMITH	66	49	*DARRELL LUHMANN	94	151
*JEREMY AND EMILY SMITH	67	36	*STACY & JULIE MILLER	95	96
IRISH RIDGE DAIRY LLC	69	82	*W DALE MILL	95	155
CASEY O'REILLY DAIRY	70	96	*AARON & TIFFANY RUTHER	96	174
DOUG & SANDRA DEROUSSEAU	70	78	*JOHN SAUBER	97	55
CANC	71	65	*LLOYD AND JULIE BLOMMEL	98	154
*MIKE & KAREN SCHILLER	72	98	*JERRY & SUE BINIEK	98	101
*DANIEL & JEFF LACANNE	73	61	SCHEFERS BROTHERS	98	77
BIRCH POINT FARMS PESHON	74	313	*JIM EVANS	98	113
*MIKE MENZE	74	85	*CHARLES FRIEDGES	98	43
RKB DAIRY	76	136	MERTON + TRUDY NELSON 2	98	12

**Average SCC for October was 202,812, down 20,000 from Oct 2019**