

DecisiveDry

Decision Support for
Selective Dry Cow *Therapy*

*While Enhancing
Dairy Sustainability*

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DAIRY RECORDS
MANAGEMENT SYSTEMS

Blanket vs Selective Dry Cow Therapy

- **On conventional dairies, majority of antimicrobials are used at dry off ***
- **Blanket Dry Cow Therapy has been gold standard for decades**
 - Treat all quarters of all cows
 - Easy – and reduces risk of mastitis in next lactation
 - Simplifies staff workflow – particularly on larger dairies
- **Selective Dry Cow Therapy uses 66% less antimicrobials than BDCT ***
 - No difference in intra-mammary infection *
 - Drops cost
 - Addresses concerns about antimicrobial resistance

* Kabera, Fidele, et al. 2021. Comparing Blanket vs. Selective Dry Cow Treatment Approaches for Elimination and Prevention of Intramammary Infections During the Dry Period: A Systematic Review and Meta-Analysis. *Front. Vet. Sci.*, 15 June 2021. v. 8.



DecisiveDry: Is the HERD a Good Candidate for SDCT?



- **Routinely assesses udder health**
 - 8 test days with SCC in 12 months
- **Low prevalence of infection**
 - Yearly Avg SCC < 250,000 cells/mL
- **Few test days with spiking SCC**
 - < 25% of Monthly SCC Avgs are \geq 250,000
- **Contagious pathogens are under control**
- **Teat sealant at dry-off**
- **Well trained staff**
 - Can select cows and use proper dry-off procedures
 - Will monitor outcomes

DecisiveDry: Is the COW a Good Candidate for SDCT?

- **Low SCC in current lactation**
 - SCC < 200,000 on last testday
 - Average SCC for last 3 testdays < 200,000
- **No recent cases of clinical mastitis**
 - Within 90-100 days



SDCT with Traditional Report – since 2009

- Once per test period
- Available after testday
- Static criteria
- No access to clinical mastitis
- Recommends additional checks
 - Producer must screen cows
- 5% herds enrolled
 - 43% when educated

FLEX REPORT		55-99-9999		CPM-AR		Test Date: 09-02-2020												
DHI-370		HENRY SMITH				Processed: 09-04-2020												
Cows to Dry in Next 60 Days																		
Test Type and Description		Breed		Date To Dry uses Due Date and your herd's setting of Days in Dry Period = 45														
31 DHI-AP		HO		Candidates for no dry cow antibiotics (Log SCC & Avg SCC/3 tests) < 4.0 AND 0 or 1 case of clinical mastitis in the lactation (check your records)														
Test Day	Milk		Actual SCC			% Tank	Cow	DryTrt (Y/N)	Date to Dry	DIM	Lact	Log SCC	Lact Avg		#> 200K	#SCC Tests	Prod Index	Total Solids
	Actual	Exp	Last-3	Prev	Curr								Curr	Prev				
64	58	1600	1600	1493	2	1763		09-20-20	285	1	6.9	6.4		8	8	90	13.3	
72	68	629	264	800	1	1586		09-21-20	352	2	6.0	4.8	1.9	8	11	110	14.2	
60	65	83	132	66		1588		09-30-20	364	2	2.4	2.8	0.5	3	11	110	15.0	
70	74	78	47	174		1693		09-30-20	395	1	3.8	1.6		1	11	117	13.8	
70	90	46	54	23		1694		09-30-20	367	1	0.9	1.9		1	11	128	12.9	
70	64	58	31	100		1574		10-06-20	312	2	3.0	1.2	2.9		10	97	14.7	
72	67	281	283	123		1470		10-08-20	258	3	3.3	2.2	1.7	2	9	93	13.2	
94	78	268	230	460	1	1491		10-12-20	261	3	5.2	2.5	2.6	3	9	94	12.8	
78	89	99	100	107		1606		10-12-20	268	2	3.1	1.8	1.7		8	104	12.6	
72	73	24	22	41		1501		10-15-20	286	3	1.7	0.5	2.0		9	113	14.0	
78	70	45	38	71		1500		10-19-20	293	3	2.5	1.0	2.7		10	91	12.6	
84	96	69	25	187		1580		10-19-20	312	2	3.9	1.0	4.4		10	130	14.1	
72	71	70	57	115		1584		10-19-20	332	2	3.2	1.5	0.5		10	115	14.1	
60	75	101	81	214		1605		10-19-20	333	2	4.1	1.4	1.9	1	10	107	13.4	
72	67	54	57	54		1705		10-19-20	351	1	2.1	3.3		2	11	96	13.0	
64	70	23	19	23		1706		10-19-20	336	1	0.9	0.7			10	106	13.5	
96	87	730	1493	162		1713		10-19-20	302	1	3.7	5.1		9	10	107	12.5	
54	74	213	246	373		1730		10-19-20	277	1	4.9	3.3		3	9	100	14.6	
30	58	99	66	123		1348		10-21-20	381	3	3.3	3.3	2.6	5	12	106	13.2	
102	85	378	35	919	2	1711		10-21-20	358	1	6.2	2.4		2	11	112	12.8	
88	73	378	566	303	1	1494		10-26-20	251	3	4.6	3.1	2.5	4	8	81	11.8	
72	74	254	259	282		AVERAGES			318		3.6	2.5	2.1			105	13.4	

Targeted Producers

- Users of Dart on-farm herd mgt software
- DataSync – backup to cloud
 - Co-hosted on-farm and DRMS servers
 - Easy access to DRMS web apps
- 45% of DRMS cows



Dart





COW COMPASS



HERD HIGHLIGHT



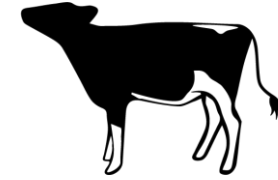
MILK METRICS



DAIRY DEPOT



DECISIVE DRY



HEIFER HUB



HERD set up

Report Name ?

Cows to Dry Off

String # of cows to include (0=all cows) ?

0

Names of Mastitis Events in Dart ?

MAST 2+ QRTS x MAST LFT FRT x MAST LT REAR x

MAST RGT FRT x MAST RT REAR x

Don't Recommend SDCT in Herd if Avg SCC > ? ?

250

Target # of Days Dry ?

60

Drug cost per cow ?

12.00

HerdCode ?

42559999

Data Source ?

DartSync

For SDCT, Don't Include Cows With Mastitis Event Within ? Days ?

100

For SDCT, Don't Include Cows With SCC > ? ?

200

Cows to dry in next X days ?

14

Labor cost per cow ?

3.00

Data source to use?

Names of on-farm Mastitis events?

Is herd a good candidate?

of days to include?

Length of dry period?

COW set up

Report Name ?

Cows to Dry Off

HerdCode ?

42559999

String # of cows to include (0=all cows) ?

0

Data Source ?

DartSync

Names of Mastitis Events in Dart ?

MAST 2+ QRTS x MAST LFT FRT x MAST LT REAR x

MAST RGT FRT x MAST RT REAR x

For SDCT, Don't Include Cows With Mastitis Event Within ? Days ?

100

Don't Recommend SDCT in Herd if Avg SCC > ? ?

250

For SDCT, Don't Include Cows With SCC > ? ?

200

Target # of Days Dry ?

60

Cows to dry in next X days ?

14

Drug cost per cow ?

12.00

Labor cost per cow ?

3.00

No mastitis in ?? days?

Max allowable SCC on last test day?

Cost of drugs?

Cost of labor?

DecisiveDry Results as of 4/11/2024

Report Name: **Cows to Dry Off**

HerdCode: **42559999**

Data source: **DartSync**

String: **0**

Past 12 Months SCC Tests: **11** ✓

Past 12 Months High SCC Tests: **0** ✓

Avg SCC Herd: **173** ✓

Herd's Max SCC for SDCT Eligibility: **250**

Cow's Max SCC for SDCT Eligibility: **200**

Cow's Min Days Since Mastitis: **100**

Target Period: **60 (days)**

Cows Suggested for Therapy: **1** ⚠

Cows Suggested for No Therapy: **7** ✓

Cost of drugs & labor for treated cows: **\$15.00**

Savings in cost of drugs & labor for non treated cows: **\$105.00**

Results

Detailed Results

Export Results

Cow	Name	Grp#	Lact#	DIM	Prev Milk	Curr Milk	Prev TD SCC	Curr TD SCC	Days Sinc Last Mast	Last 3TD SCC	SDCT elig	Dry	Due
444 ✓	444	2	4	261	92.4	75.5	13	27		17	Y ✓	05/19 ✓	07/18
512 ✓	512	2	3	423	61.2	54.8	81	76		71	Y ✓	05/19 ✓	07/18
599 ✓	599	2	3	257	107.1	103.7	19	31		28	Y ✓	05/19 ✓	07/18
844 ✓	844	2	1	392	94.8	101.6	50	23		37	Y ✓	05/19 ✓	07/18
918 ✓	918	2	1	253	69.8	65.5	44	71		51	Y ✓	05/26 ✓	07/25
711 ✓	711	2	2	341	49.6	32.8	141	123		114	Y ✓	05/26 ✓	07/25
763	763	2	2	290	79.0	86.8	857 ⚠	325 ⚠		817 ⚠	N	05/26	07/25
591 ✓	591	2	3	253	75.9	85.2	50	31		25	Y ✓	05/26 ✓	07/25



HERD info

DecisiveDry Results as of 4/11/2024

Report Name: **Cows to Dry Off**
HerdCode: **42559999**
Data source: **DartSync**
String: **0**

Past 12 Months SCC Tests: **11** ✓
Past 12 Months High SCC Tests: **0** ✓
Avg SCC Herd: **173** ✓
Herd's Max SCC for SDCT Eligibility: **250**
Cow's Max SCC for SDCT Eligibility: **200**
Cow's Min Days Since Mastitis: **100**

Target Period: **60 (days)**
Cows Suggested for Therapy: **1**
Cows Suggested for No Therapy: **7**
Cost of drugs & labor for treated cows: **\$15.00**
Savings in cost of drugs & labor for non treated cows: **\$105.00**

Cows to treat

Eligible for SDCT

251 cows - 2 weeks

COWS to DRY

Cow	Name	Grp#	Lact#	DIM	Prev Milk	Curr Milk	Prev TD SCC	Curr TD SCC	Days Sinc Last Mast	Last 3TD SCC	SDCT elig	Dry	Due
444 ✓	444	2	4	261	92.4	75.5	13	27		17	Y ✓	05/19 ✓	07/18
512 ✓	512	2	3	423	61.2	54.8	81	76		71	Y ✓	05/19 ✓	07/18
599 ✓	599	2	3	257	107.1	103.7	19	31		28	Y ✓	05/19 ✓	07/18
844 ✓	844	2	1	392	94.8	101.6	50	23		37	Y ✓	05/19 ✓	07/18
918 ✓	918	2	1	253	69.8	65.5	44	71		51	Y ✓	05/26 ✓	07/25
711 ✓	711	2	2	341	49.6	32.8	141	123		114	Y ✓	05/26 ✓	07/25
763	763	2	2	290	79.0	86.8	857 ▲	325 ▲		817 ▲	N	05/26	07/25
591 ✓	591	2	3	253	75.9	85.2	50	31		25	Y ✓	05/26 ✓	07/25

Eligible for SDCT
Elig = Y
Green

Cow to treat
Elig = N
Pink

HERD info

DecisiveDry Results as of 4/10/2024

Report Name: **Dry-Off List**
HerdCode: **42998888**
Data source: **DartSync**
String: **0**

Past 12 Months SCC Tests: **12** ✓
Past 12 Months High SCC Tests: **1** ✓
Avg SCC Herd: **204** ✓
Herd's Max SCC for SDCT Eligibility: **250**
Cow's Max SCC for SDCT Eligibility: **150**
Cow's Min Days Since Mastitis: **100**

Target Period: **60 (days)**
Cows Suggested for Therapy: **22**
Cows Suggested for No Therapy: **33**
Cost of drugs & labor for treated cows: **\$330.00**
Savings in cost of drugs & labor for non treated cows: **\$495.00**

Cows to treat

Eligible for SDCT

1340 cows - weekly

HERD info

DecisiveDry Results as of 4/18/2024

Past 12 Months SCC Tests:	13	✓	Target Period:	60 (days)
Past 12 Months High SCC Tests:	6	⚠	Cows Suggested for Therapy:	9
Avg SCC Herd:	194	✓	Cows Suggested for No Therapy:	15
Herd's Max SCC for SDCT Eligibility:	200		Cost of drugs & labor for treated cows:	\$135.00
Cow's Max SCC for SDCT Eligibility:	150		Savings in cost of drugs & labor for non treated cows:	\$225.00
Cow's Min Days Since Mastitis:	30			

NOT eligible for SDCT

Too many test days w/ high SCC

1840 cows - weekly

HERD info

DecisiveDry Results as of 3/25/2024

Past 12 Months SCC Tests:	7	⚠	Target Period:	60 (days)
Past 12 Months High SCC Tests:	0	✓	Cows Suggested for Therapy:	2
Avg SCC Herd:	150	✓	Cows Suggested for No Therapy:	10
Herd's Max SCC for SDCT Eligibility:	250		Cost of drugs & labor for treated cows:	\$30.00
Cow's Max SCC for SDCT Eligibility:	200		Savings in cost of drugs & labor for non treated cows:	\$150.00
Cow's Min Days Since Mastitis:	100			

NOT eligible for SDCT

Doesn't test frequently

160 cows - monthly

COWS to DRY

Cow	Name	Grp#	Lact #	DIM	Prev Milk	Curr Milk	Last 3TD SCC	Prev TD SCC	Curr TD SCC	SDCT Elig	Dry	Days Dry Prev Lact	Due	Curr Lact Mast	Days Sinc Last Mast	Prev Lact Mast	Curr TD SCC LS	Curr Lact SCC	Curr Lact SCC LS
8160 ✓	8160	7	2	335	110.7	76.8	40	13	123	Y ✓	05/13 ✓	45	07/12	Y	218		3.3	64	1.5
7110	7110	8	4	328	89.1	75.0	1065 ⚠	400 ⚠	283 ⚠	N	05/08	52	07/07	Y	138	Y	4.5	741	5.0
7676	7676	7	3	277	94.2	86.1	922 ⚠	400 ⚠	1970 ⚠	N	05/03	54	07/02	Y	90 ⚠		7.3	397	4.1
8153	8153	8	2	297	89.1	83.7	30	19	66	N	05/11	48	07/10	Y	62 ⚠		2.4	20	0.7
7618 ✓	7618	7	3	302	70.8	58.5	26	19	33	Y ✓	05/01 ✓	74	06/30				1.4	52	1.3
8222 ✓	8222	8	2	288	86.7	81.9	34	76	13	Y ✓	05/01 ✓	50	06/30				0.1	35	0.9
8681 ✓	8681	7	1	342	119.7	119.4	15	13	18	Y ✓	05/01 ✓		06/30				0.5	30	1.0
8888 ✓	8888	7	1	284	80.1	78.0	24	20	29	Y ✓	05/01 ✓		06/30				1.2	27	1.0
6449 ✓	6449	7	5	300	112.8	99.3	32	22	62	Y ✓	05/02 ✓	59	07/01				2.3	2589	2.5

Eligible for SDCT

*Elig = Y
Green*

NOT eligible

*Elig = N
Pink*

Other features

Cow	Name	Grp#	Lact #	DIM	Prev Milk	Curr Milk	Last 3TD SCC	Prev TD SCC	Curr TD SCC	SDCT Elig	Dry	Days Dry Prev Lact	Due	Curr Lact Mast	Days Sinc Last Mast	Prev Lact Mast	Curr TD SCC LS	Curr Lact SCC	Curr Lact SCC LS
12039 ✓	12039	12	2	338	76.2	66.6	50	76	35	Y ✓	05/06 ✓	52	07/05			Y	1.5	30	1.2
16537 ✓	16537SS	3	2	342	93.6	83.4	23	27	27	Y ✓	05/08 ✓	62	07/07				1.1	15	0.3
9956 ✓	9956S	13	4	312	88.5	59.1	51	71	66	Y ✓	05/10 ✓	64	07/09				2.4	23	0.7
11818 ✓	11818	14	2	331	90.0	84.9	103	93	71	Y ✓	05/11 ✓	59	07/10	Y	293	Y	2.5	93	2.7
13251 ✓	13251	1	1	295	59.4	51.0	34	27	41	Y ✓	05/11 ✓		07/10	Y	294		1.7	34	1.1
13424 ✓	13424S	2	1	295	71.1	72.6	21	29	22	Y ✓	05/11 ✓		07/10	Y	294		0.8	19	0.5
799 ✓	799	4	3	328	59.7	42.0	80	76	123	Y ✓	05/12 ✓	48	07/11				3.3	32	1.1
1811 ✓	1811NEW	2	1	299	95.4	82.8	19	19	20	Y ✓	05/12 ✓		07/11	Y	293		0.7	28	0.7
9153	9153W	14	5	317	83.4	75.3	172 ⚠	174 ⚠	230 ⚠	N	05/12	59	07/11	Y	238		4.2	115	2.8
9643 ✓	9643	4	4	283	90.9	89.4	84	54	141	Y ✓	05/12 ✓	65	07/11			Y	3.5	47	1.7
10477	10477W	3	7	295	96.0	89.7	17	20	18	Y ✓	05/12 ✓	67	07/11				0.5	15	0.3

Sortable columns

Uses highlights and color

Wide/narrow versions

Click cow for all info

Export to Excel

Cow	Name	Grp#	Lact#	DIM	PrevMilk	CurrMilk	PrevTD SCC	CurrTD SCC	DaysSinc LastMast	Last3TD SCC	SDCT Elig	Dry	Due
580	580	2	3	265	63.2	41.7	174	141		123	Y	05/11	07/10
611	611	2	3	265	95.1	90.7	57	57		53	Y	05/12	07/11
732	732	2	2	301	57.4	47.7	132	152		90	Y	05/12	07/11
877	877	2	1	334	94.2	91	13	13		13	Y	05/12	07/11
5165	5165	2	6	269	95.2	92.1	13	23		16	Y	05/12	07/11
872	872	2	1	323	65.6	63.7	230	400		352	N	05/16	07/15
705	705	2	2	458	48.8	39.5	66	123		87	Y	05/16	07/15
844	844	2	1	392	94.8	101.6	50	23		37	Y	05/19	07/18
599	599	2	3	257	107.1	103.7	19	31		28	Y	05/19	07/18
444	444	2	4	261	92.4	75.5	13	27		17	Y	05/19	07/18
512	512	2	3	423	61.2	54.8	81	76		71	Y	05/19	07/18



Summary

DecisiveDry to Manage Selective Dry Cow Therapy

- Customizable for the **HERD**
- Customizable for the **COW**
- Up-to-the-minute **DATA**
- Provides estimate of **FINANCIAL IMPACT**
- Delivers decision support **COWSIDE**

Questions?

