



## SCOURING CALF ASSESSMENT

Stage	Early Fluid Loss	Moderate Fluid Loss	Severe Fluid Loss
hydration	< 5% dehydration	7 % dehydration	>9% dehydration
stance	standing	sternal	flat on side
skin tent	<4 seconds	5 seconds	stays tented (>5 seconds)
gums/mouth	warm, slick and wet	sticky but warm	cold, pale and dry
eyes	bright	dull and slightly sunken with small gap visible	deeply sunken with large gap visible
suck reflex	strong	weak	absent
mentally	mildly depressed	dull	coma; dead if >12%
legs	warm	cold	cold

## SCOURS TREATMENT

Treatments	Early Fluid Loss	Moderate Fluid Loss	Severe Fluid Loss
milk	leave on cow	Give replacement milk (1 to 2 Litres) every 6 to 24 hours until able to suckle on cow. <b>ONLY A FEW ELECTROLYTE SOLUTIONS ARE APPROVED TO BE GIVEN WITH MILK.</b>	None until stage upgraded to moderate (but <b>milk needs to be given within 36 hours of last milk meal</b> )
electrolytes	1 - 2 L electrolytes twice daily until stools firming up. <b>Calf Lyte II</b> is what we recommend to use.	2 - 4 L High Energy electrolytes every 2 to 4 hours until able to stand and suck. <b>Calf Lyte II HE</b> is what we recommend to use.	<b>4-8 L IV fluids</b> is the only way to save this calf. Neither Oral nor SQ electrolytes will be absorbed.
Oral Medications	Aim is to lower daily fluid losses from diarrhea. May use <b>60 to 90 cc Kaolin/Pectin per dose</b> (added to electrolytes). Probiotics may be useful as well.		None until stage upgraded to moderate
	Scour boluses may be useful in mildly dehydrated calves	Only use boluses if CONFIRMED cause of scours is coccidia	
Injectible Medications	Trivetrin/Borgal 3 cc per 100 lbs IM once per day for 3 to 5 days.		
	OR Excenel RTU 1 cc per 100 lbs IM or SQ once per day for 3 to 5 days.		
External Heat	Warmed electrolytes should be all that is needed at this stage.	External heat source (like heater or heat lamp) and a warm, indoor place necessary to help calf recover. All fluids given to these calves should also be as close to normal body temperature as possible (38 degrees Celcius, or 101 degrees Fahrenheit)	

## SCOURS PREVENTION TIPS

**Isolate scouring calves from healthy calves.** Scouring calves cause huge environmental contamination with the virus/bacteria causing the disease.

**Strict hygiene must be observed to prevent transfer.** All calf feeding/tubing equipment should be sterilized between EACH use (hot water and anti-septic soap). Do not let equipment used on scouring calves EVER be used on newborn healthy calves.

**Heifers should NOT be calved among mature cows** (heifer calves are more susceptible to illness). Cows and Heifers should be separated 2 to 3 weeks before calving begins.

**Tube every newborn calf within 2 HOURS of birth with colostrum.** Colostrum must be treated carefully and stored properly to prevent contamination with bacteria. Tubing/feeding equipment must be meticulously cleaned after every calf.

**Move cow-calf pairs to dry pasture 1 day after calving.** If scours breaks out in a group on pasture, all new calves and cows should be pastured in a separate area.

**DO NOT bring in replacement calves** (usually colostrum deprived) **if you have scouring calves.** Any replacement calf is expected to develop the same problem.

## SCOURS VACCINATION PREVENTION PROGRAMS

VACCINE	COMPANY	HEIFERS	BOOSTER	COWS	CALVES	ROUTE	COVERS
ScourGuard 4KC	Pfizer	FIRST VACCINE 6 TO 9 WEEKS BEFORE CALVING	SECOND VACCINE 3 TO 6 WEEKS BEFORE CALVING	ANNUAL BOOSTER 3 TO 6 WEEKS BEFORE CALVING	PROTECTION GIVEN THROUGH COLOSTRUM	INTRA-MUSCULAR	ROTAVIRUS (G10, G6), CORONAVIRUS, E.COLI K99
SCOURBOS 4 SCOURBOS 9	Novartis	SCOUR BOS 4 12 TO 16 WEEKS BEFORE CALVING	SCOUR BOS 9 8 TO 10 WEEKS BEFORE CALVING	SCOUR BOS 9 ANNUAL BOOSTER 8 TO 10 WEEKS BEFORE CALVING	PROTECTION GIVEN THROUGH COLOSTRUM	INTRA-MUSCULAR	3 ROTAVIRUS ISOLATES, CORONAVIRUS, 4 E.COLI ISOLATES, C.PERFRINGENS TYPE C
JENCINE ERC	SCHERING-PLOUGH	FIRST VACCINE 12 TO 13 WEEKS BEFORE CALVING	SECOND VACCINE 3 TO 6 WEEKS AFTER INITIAL VACCINE	ANNUAL BOOSTER 5 TO 7 WEEKS BEFORE CALVING	PROTECTION GIVEN THROUGH COLOSTRUM	UNDER THE SKIN	E.COLI K99, CORONAVIRUS, ROTAVIRUS G6, C.PERFRINGENS TYPES C AND D
Colimmune-Oral	Bioniche				VACCINE GIVEN TO NEWBORN CALVES	GIVEN ORALLY IN FIRST 12 HOURS OF LIFE	E.COLI K99

## Fluid Loss Replacement Chart for Scouring calves

Body Weight		Daily Needs in Litres	Litres of Daily Losses from scouring			Total Litres per day (minimum and maximum)	Extra Litres to be replaced if 5% body weight loss	Extra Litres to be replaced if 7% body weight loss	Litres to be replaced IV ONLY if 9% body weight loss
lbs	kgs		mild	moderate	severe				
40	18	0.9	1	2.5	4	1.9 to 4.9 L	0.9	1.3	1.6
50	23	1.1	1	2.5	4	2.2 to 5.2 L	1.1	1.6	2.0
60	27	1.4	1	2.5	4	2.4 to 5.4 L	1.4	1.9	2.5
70	32	1.6	1	2.5	4	2.6 to 5.6 L	1.6	2.2	2.9
80	36	1.8	1	2.5	4	2.8 to 5.8 L	1.8	2.5	3.3
90	41	2.0	1	2.5	4	3.0 to 6.0 L	2.0	2.9	3.7
100	45	2.3	1	2.5	4	3.3 to 6.3 L	2.3	3.2	4.1
110	50	2.5	1	2.5	4	3.5 to 6.5 L	2.5	3.5	4.5
120	55	2.7	1	2.5	4	3.7 to 6.7 L	2.7	3.8	4.9
130	59	3.0	1	2.5	4	4.0 to 7.0 L	3.0	4.1	5.3
140	64	3.2	1	2.5	4	4.2 to 7.2 L	3.2	4.5	5.7
150	68	3.4	1	2.5	4	4.4 to 7.4 L	3.4	4.8	6.1

The litres for body weight loss from dehydration only needs to be replaced on the FIRST day. **Daily Needs + Daily Losses = number of litres required EACH day until the stool firms up.** The total volume is divided into 2 litre (1/2 gallon) doses. Calves should be supplemented a MINIMUM of 2 times per day (in the early loss stage) to every 2 hours (in moderate loss stage). **REMEMBER, SEVERE FLUID LOSS STAGE (>9%) CAN ONLY BE CORRECTED WITH INTRAVENOUS FLUID TREATMENT.**





