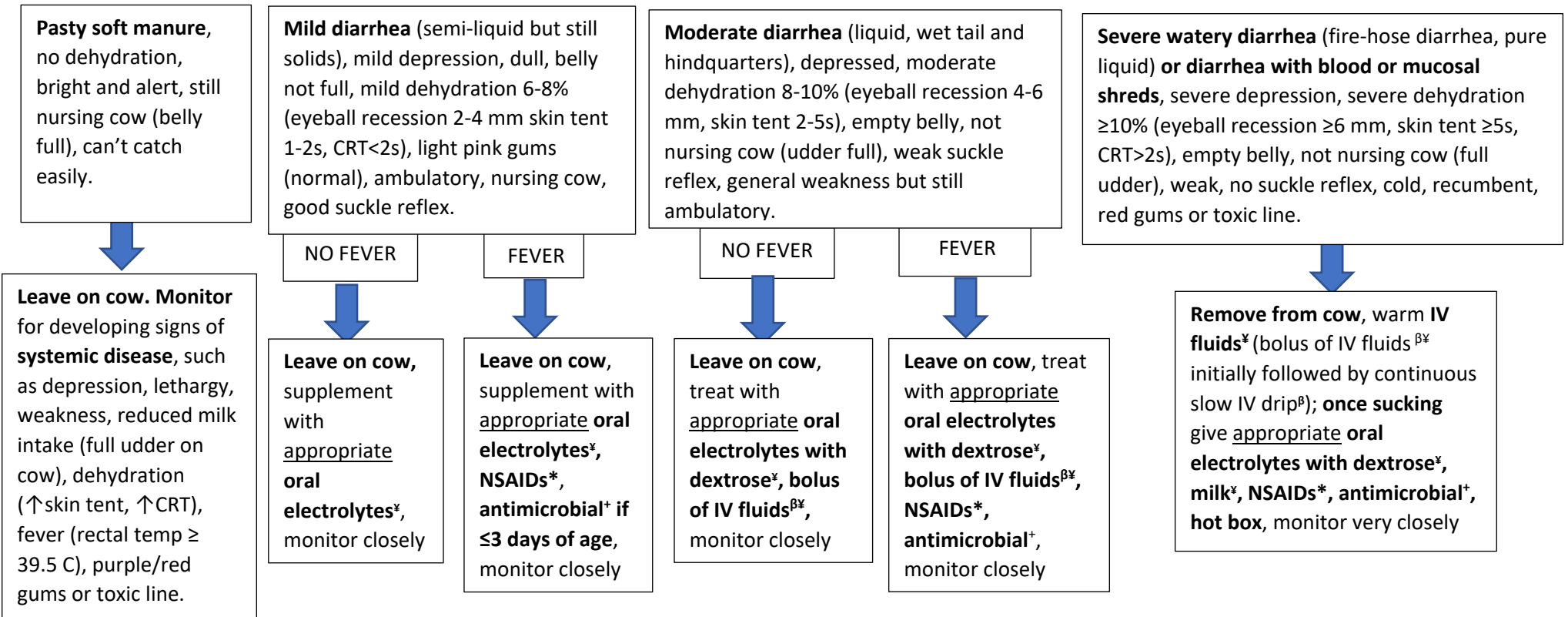


Diarrheic Beef Calf (<30 days old) – Antimicrobial Treatment Decision Tree



***NSAID** – do not exceed 3 doses or use in dehydrated calves. Meloxicam preferred over flunixin due to COX2 target. Vet Clin North Am Food Anim Pract. 2009 Mar;25(1):101-20. J Anim Sci. 2010 Jun;88(6):2019-28. ^β**Choice of fluids for IV bolus** (hypertonic saline or isotonic or hypertonic bicarb) depending on acid-base balance, [¥]**IV and Oral Fluid and Milk Recommendations:** J Vet Med A Physiol Path Clin Med 2003 Mar;50(2):57-61. J Vet Intern Med 2017 May;31(3):907-921; Vet Clin North Am Food Anim Pract. 2014 Jul;30(2):409-27; J Dairy Sci. 2019 Dec;102(12):11337-11348. J Dairy Sci. 2020 Nov;103(11):10446-10458. Vet Clin Food Anim 25 (2009) 55–72. Vet J. 2017; 226:15-25.

***Only use antimicrobials in diarrheic calves with signs of systemic illness (dehydration, depression, fever, weak or absent suckle reflex, generalized weakness, red gums/toxic line) or diarrhea with blood or mucosal shreds and if disease not coccidiosis (≥3 wk of age):** a) TMP-Sulfa (caution in dehydrated calves) - 25 mg/kg IV or IM every 24 hours for maximum of 5 treatments b) ceftiofur – 2.2. mg/kg IM every 12 hours for minimum of 3 days, c) parenteral fluoroquinolones per label dosage and route (ELDU), d) Ampicillin -10 mg/kg IM every 12 hours for minimum of 3 days. J Vet Intern Med 2004; 18:8–17. Res Vet Sci. 2003 Apr;74(2):171-8. Vet Clin North Am Food Anim Pract. 2009 Mar;25(1):101-20. J Dairy Sci. 2014 Dec;97(12):7644-54. **Cryptosporidiosis** Halocur® or Halagon® and fluids Parasitology. 2020 Dec 2;1-12. **Coccidiosis** Baycox® or Amprol® for treatment; ionophores, Decco® or Amprol® for control/prevention. **Non-antimicrobial alternatives** review J Vet Res 2020. 64,1 119-126.

Note: Fecal bacterial culture and antimicrobial susceptibility testing is not recommended in calves with diarrhea because fecal bacterial populations do not accurately reflect small intestinal or blood bacterial populations and because the break points for susceptibility test results have not been validated. J Vet Intern Med 2004; 18:8–17. **If herd problem**, may consider fecal sampling to determine if problem *E. coli* (usually ≤3 days of age), cryptosporidia (5-14 days old), rota/corona virus (5-14 days old), bloody scours (DDX: *Clostridial perfringens*, *Salmonella* spp), coccidiosis ≥ 14 days old. Mixed infections common. **If herd problem, investigate risk factors associated with diarrhea and adjust to prevent and control disease e.g. poor colostral immunity (Failure of Passive Transfer) overcrowding, environmental factors including poor hygiene...**Vet Clin North Am Food Anim Pract. 2012 Nov; 28(3): 465–481.