# **University of California Sierra Foothill Research and Extension Center** ANIMAL HEALTH PROGRAM

This document describes the routine animal health procedures followed at the University of California Sierra Foothill Research and Extension Center (SFREC). These guidelines are reviewed, updated and approved annually by the SFREC Animal Research Committee. The active ingredients and vaccines are available under a number of brand names. Brand names used in these recommendations are examples only and not specific endorsements or recommendations.

### ALWAYS READ AND CAREFULLY FOLLOW DRUG AND VACCINE LABEL INSTRUCTIONS.

The herd manager, in consultation with the clinical veterinarian, has the discretion to alter timing of vaccinations and other health management activities if conditions are such that using the current protocol may adversely impact animal health. The clinical veterinarian is to be contacted if below treatments do not work.

Epinephrine RX should be on hand for anaphylactic shock.

Mineral supplements (including selenium) will be provided year round to ALL animals.

Diagnosis of unknown causes of death or illness: Cause of disease to be determined if possible with assistance of Center Veterinarian and UCD VMTH and California Animal Health and Food Safety Laboratory.

CALVES (UNWEANED, WEANLINGS, YEARLINGS)		
Birth-1 day	Tag, weigh, chlorhexadine solution on naval if assisted birth or exposed to contaminated areas.	
<b>Dehorn</b> (< 3 mos)	Most are polled. If necessary, use dehorner and horn iron following AG Guide. Use local anesthesia if greater than 1 month of age.	
<b>Branding</b> (2.5 – 5 mos)	Hot iron "UC"	
<b>Castration</b> (2.5 – 5 mos)	"Knife" Method/ E-Z Bloodless Castrator. <i>If castration is by banding, follow Tetanus protocol below.</i>	
General	Provide supplemental selenium to all calves by injection, boluses or through supplemental feeding.	
Shipping	Prefer 45 days preconditioning after weaning, before shipping.	
Number Brand (12-24 mos)	Freeze brand replacements (alcohol and dry ice)	
<b>Tetanus</b> (2-3 months)	<b>PROPHYLAXIS</b> Clostridium tetani antitoxin and vaccination at castration, at separate sites (only if castration is by banding).	
<b>1</b> <sup>st</sup> <b>Vaccination</b> (2.5 – 5 months)	<ul> <li>Modified Live vaccine: BVD, IBR, P13, BRSV (+Lepto 5-way)</li> <li>Clostridial 8-way</li> <li>Histophilus somni vaccine (e.g. Somnus)</li> </ul>	
<b>Booster</b> (2 weeks prior to wean)	<ul> <li>Modified Live Vaccine – BVD, IBR, PI3, BRSV (+Lepto 5-way)</li> </ul>	

UC SFREC Animal Health Program

	<ul> <li>Histophilys somni vaccine (e.g. Somnus)</li> <li>Feedlot steers and heifers: Mannheimia hemolytica vaccination</li> </ul>
Pink Eye Vaccine	Administer injectable or implants 2 weeks prior to weaning and/or prior to peak fly depending on label requirements.
<b>Anaplasmosis</b> (5-10 months)	After selection of replacements: Anaplasma marginale vaccination (for cattle < 11 months of age)
<b>Brucellosis</b> (5-10 mos)	Heifers receive Brucella abortus (RB-51) vaccine by veterinarian
Anthelmintics (Wean/Postwean)	Long range wormer:Dectomax™, Ivomec™, Valbazen™ (rotation suggestion)
<b>Booster</b> (Post Wean)	<ul> <li>Modified Live Vaccine – BVD, IBR, PI3, BRSV (+ Lepto 5-way</li> <li>Histophilus Somnii Vaccine (e.g. Somnus)</li> <li>Clostridial 8-way (can be given at the same time as Brucellosis for heifers</li> <li>Feedlot steers and heifers: Mannheimia hemolytica vaccination</li> </ul>
<b>Coccidiosis Prevention</b> (Post Wean)	Decox™, Bovatec™, Rumensin™, Medicated Block (Free Chioce)
<b>REPLACEMENT HEIFERS (</b>	Fall Calvers)
General	Provide supplemental selenium to all calves by injection, boluses or through supplemental feeding.
Pre Breeding (October)	<u>PROPHYLAXIS</u> Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way
(October) Booster	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way
(October) Booster (November) Booster (Oct/Nov)	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way
(October) Booster (November) Booster (Oct/Nov) Reproductive	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way Clostridial 8-way
(October) Booster (November) Booster (Oct/Nov) Reproductive (Oct/Nov) Pregnancy Exam	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way Clostridial 8-way Tract Score – DVM 45 days after bulls are removed from cows. If substantial abortion problem, boost w/
(October) Booster (November) Booster (Oct/Nov) Reproductive (Oct/Nov)	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way Clostridial 8-way Tract Score – DVM 45 days after bulls are removed from cows. If substantial abortion problem, boost w/
(October) Booster (November) Booster (Oct/Nov) Reproductive (Oct/Nov) Pregnancy Exam COWS (Fall Calvers)	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way         Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way         Clostridial 8-way         Tract Score – DVM         45 days after bulls are removed from cows. If substantial abortion problem, boost w/ modified live vaccine – BVD, IBR, PI3, BRSV/Lepto 5-way + (Spirovac™)         Provide supplemental selenium to all calves by injection, boluses or through

Anthelmintics (May)	Long Range Wormer: Dectomax <sup>TM</sup> , Ivomec <sup>TM</sup> +, or Valbazen <sup>TM</sup> (Rotation Suggested)
<b>Calf Scours</b> (prior to calving)	If pregnant, E.coli, Rotavirus, Corona virus vaccine (Scourguard™) – Only on years following high incidence of scours.
Pregnancy Exam	45 days after bulls are removed from cows. If substantial abortion problem, boost w/ modified live vaccine – BVD, IBR, PI3, BRSV/Lepto 5-way + (Spirovac™)
<b>REPLACEMENT HEIFERS (</b>	Spring Calvers)
General	Provide supplemental selenium to all calves by injection, boluses or through supplemental feeding.
	PROPHYLAXIS
Pre Breeding (April)	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way
Booster (May)	Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way
<b>Booster</b> (April/May)	Clostridial 8-way
<b>Reproductive</b> (June)	Tract Score – DVM
Pregnancy Exam	45 days after bulls are removed from cows. If substantial abortion problem, boost w/ modified live vaccine – BVD, IBR, PI3, BRSV/Lepto 5-way + (Spirovac™)
<b>COWS (Spring Calvers)</b>	
General	Provide supplemental selenium to all calves by injection, boluses or through supplemental feeding.
Pre Breeding (May)	<b>PROPHYLAXIS</b> If open, Modified Live Vaccine – BVD, IBR, PI3, BRSV + Vibrio/Lepto 5-way
<b>Annual Revaccination</b>	
(May/June)	Clostridial 8-way
(May/June) Anthelmintics (November)	Clostridial 8-way Long Range Wormer: Dectomax™, Ivomec™ +, or Valbazen™ (Rotation Suggested)
Anthelmintics	

## CALVING

#### **Dystocia**:

Assist as necessary; most difficult cases to VMTH in Davis

#### **Prolapse:**

- 1. "Shrink" tissue with powdered sugar IF NEEDED
- 2. Re-place tissue-epideral (Lidocine<sup>™</sup>)
- 3. Pin vulva if necessary
- 4. Administer systemic penicillin, re-treat as needed.
- 5. Remove pins
- 6. Cull cow, and where possible, offspring

#### **Metritis & Retained Placenta:**

- 1. Systemic Penicillin
- 2. Administer Lutalyse<sup>™</sup>
- 3. Repeat steps 1 & 2 as needed

#### BULLS

General	Provide supplemental selenium to all calves by injection, boluses or through supplemental feeding.	
<b>Pre Breeding</b> (December)	<ul> <li>PROPHYLAXIS (For Fall Breeders)</li> <li>Modified Live Vaccine – BVD, IBR, PI3, BRSV +Vibrio/Lepto 5-way +Spirovac<sup>™</sup></li> <li>Clostridial 8-way</li> </ul>	
Anthelmintics (May)	Long Range Wormer: Valbazan™/ Ivomec Plus ™/ Dectomaz™ (Rotation suggested)	
<b>Reproductive</b> (Nov/Dec)	Tract exam and semen test (BSE), Tritrichomonas testing by DVM	
HORSES		
<b>Vaccinations</b> Feb – 1x/year	E/W/V Encephalomyelitis, Tetanus, Influenza, West Nile and Rabies	
As Needed	Rhinopneumontis EHV1 & EHV4 - as needed for newly introduced, young (< 5 years old) and pregnant mares (Need booster 3-4 weeks after 1st vaccination on all)	
<b>Anthelmintics</b> Aug & Feb	Pyrantel Pamoate	
Oct & April	Ivermectin	
Dec & June	Benzimindazole	
Hoof Care (every 8 weeks)	Necessary care provided by professional farrier	
BEEF CATTLE TREATMENTS		

# **Scours** <u>**Calves:**</u> Sustained release ocytetracylcine & long acting sulfamethazine 1-3 times, every other day; administer BanamineTM by IV daily as necessary. Oral fluids/electrolytes if needed.

- **Coccidiosis** <u>**Calves:**</u> Long acting sulfamethazine, 3 times, every other day; treat group with preventative, if necessary, such as Corid<sup>TM</sup>, Bovatec<sup>TM</sup>, Decox<sup>TM</sup> and/or Rumensin<sup>TM</sup>.
- **Anaplasmosis** <u>All:</u> Sustained release oxytetracycline 1-3 times every other day, or Oxytetracycline 3 times daily (only if cattle can be restrained without over exciting them).
  - **Pneumonia** If temperature is 103.5°F or greater, Banamine should be administered in addition to below treatments.

**Unweaned Calves:** 1<sup>st</sup> Treatment: Resflor<sup>™</sup> 1 time or Nuflor<sup>™</sup> 1 time; 2<sup>nd</sup> Treatment: Draxxin<sup>™</sup> 1 time; 3<sup>rd</sup> Treatment: Baytril<sup>™</sup> (enrofloxacin) 1 time; 4<sup>th</sup> Treatment: Excede<sup>™</sup> (centiofur).

Weanling and Yearling Calves: Sustained release oxytetracycline (LA-200<sup>™</sup> or LA-300<sup>™</sup>) & long acting sulfamethazine 1 - 3 times, every other day; administer Banamine<sup>™</sup> by IV daily as necessary; 2nd Treatment: Baytril<sup>™</sup> (enrofloxacin) 1 time; 3rd Treatment: Nuflor<sup>™</sup> (florfenicol) 1 time; 4th Treatment: Excede<sup>™</sup> (ceftiofur). Alternate Treatment: Resflor<sup>™</sup>

**<u>Cows and Bulls</u>:** 1st Treatment: Resflor<sup>™</sup> 1 time or Draxxin<sup>™</sup> 1 time; 2nd Treatment: Nuflor<sup>™</sup> (florfenicol) 1 time; 3rd Treatment: Baytril<sup>™</sup> (enrofloxacin) 1 time; 4th Treatment: Excede<sup>™</sup> (centiofur).

Pink EyeCalves (Unweaned-Yearlings):<br/>1st Treatment: Nuflor™ (florfenicol – off label use<br/>determined to be effective); 2nd Treatment: Sustained release oxytetracycline (LA-<br/>200™) & Patch 1 time, ½ cc Sub-conjunctival penicillin

**<u>Cows and Bulls</u>**: Eye patch 1 time/Florfenicol (Nuflor<sup>™</sup>) off label use but determined to be effective if needed, administer Banamine<sup>™</sup> by IV, ½ cc Sub-conjunctival penicillin

- Abscesses <u>All</u>: Drain/Flush/Betadine<sup>™</sup> or Nolvasan<sup>™</sup> topical/Fly-repellant/PPG if necessary
  - **Foot Rot** <u>**Unweaned Calves:**</u> Clean Wound. 1<sup>st</sup> Treatment: Nuflor<sup>™</sup> or Resflor<sup>™</sup>; 2<sup>nd</sup> Treatment: sustained release oxytetracycline (LA-200<sup>™</sup>)

**Weanling and Yearling Calves:** Nuflor<sup>™</sup>(Florfenicol) or Resflor<sup>™</sup>, 2nd treatment LA-200<sup>™</sup> (sustained release oxyteracycline), or 3rd treatment Oral Sulfa/PPPG

<u>Cows and Bulls:</u> Clean Wound; Oral Sulfa; PPG; Nuflor™ (IM); administer Banamine™ IV