

# Vaccine Protocols for the Cow Calf Producer of Central California

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# Customize Your Protocol

- ✿ One vaccine protocol does not fit everyone's needs!
- ✿ What are your goals?
- ✿ What is your risk ?
- ✿ **Talk to your vet!**

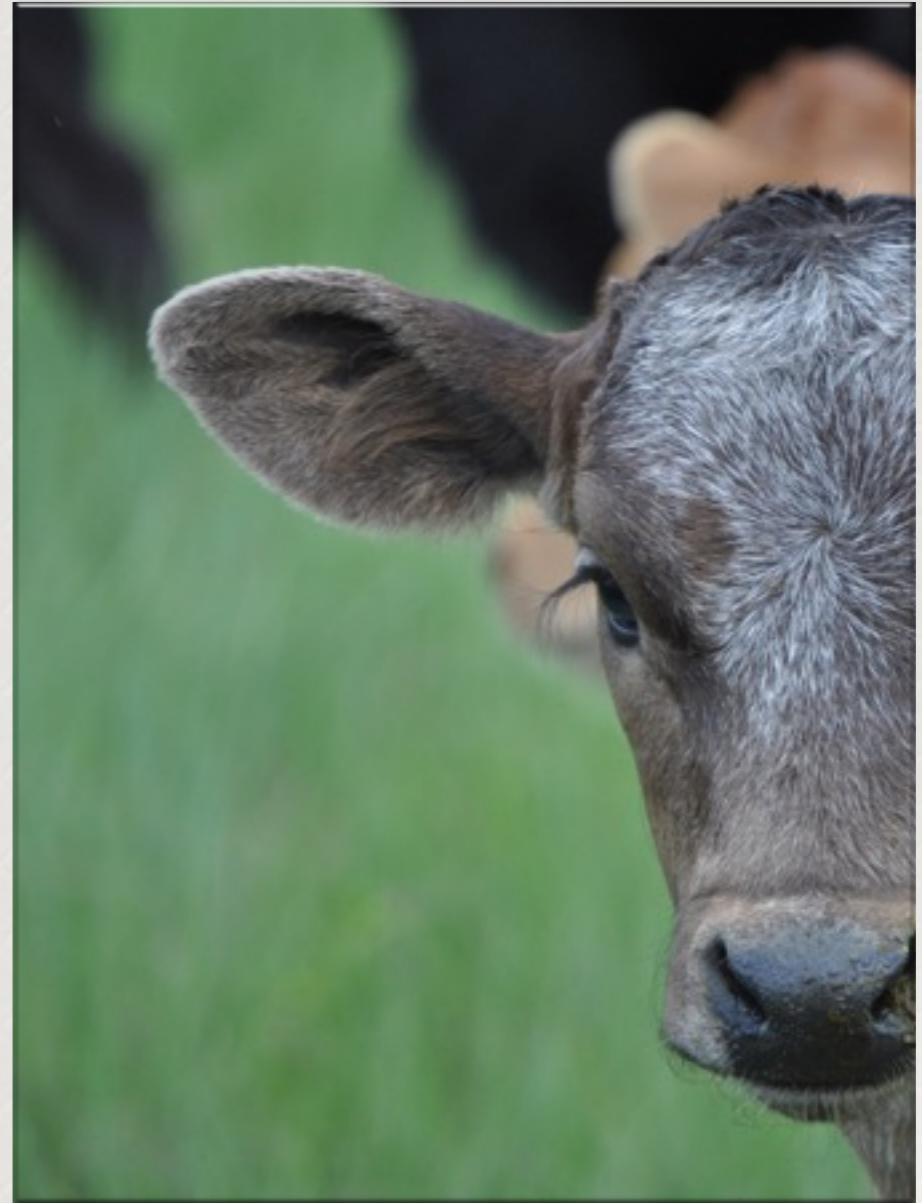


# Risk Benefit Analysis

- ✿ Risk of NOT vaccinating - \$\$ lost with tx/labor cost, poor repro/gain performance
- ✿ Risk of vaccination - labor costs, vx cost, injury, stress...
- ✿ Benefit of NOT vaccinating - decrease labor, vaccine cost, less facility costs
- ✿ Benefit of vaccination - Disease prevention = \$\$\$\$ saved, cattle get handled more frequently, increase management decisions, better performance, healthier calves = more \$\$

# What issues do you have in your herd?

- ✿ Abortions
- ✿ Poor pregnancy rates
- ✿ Neonatal diarrhea - scours
- ✿ Respiratory disease
- ✿ Pinkeye outbreaks
- ✿ Initial diagnostics can impact your prevention program



# How do vaccines stimulate the immune system?

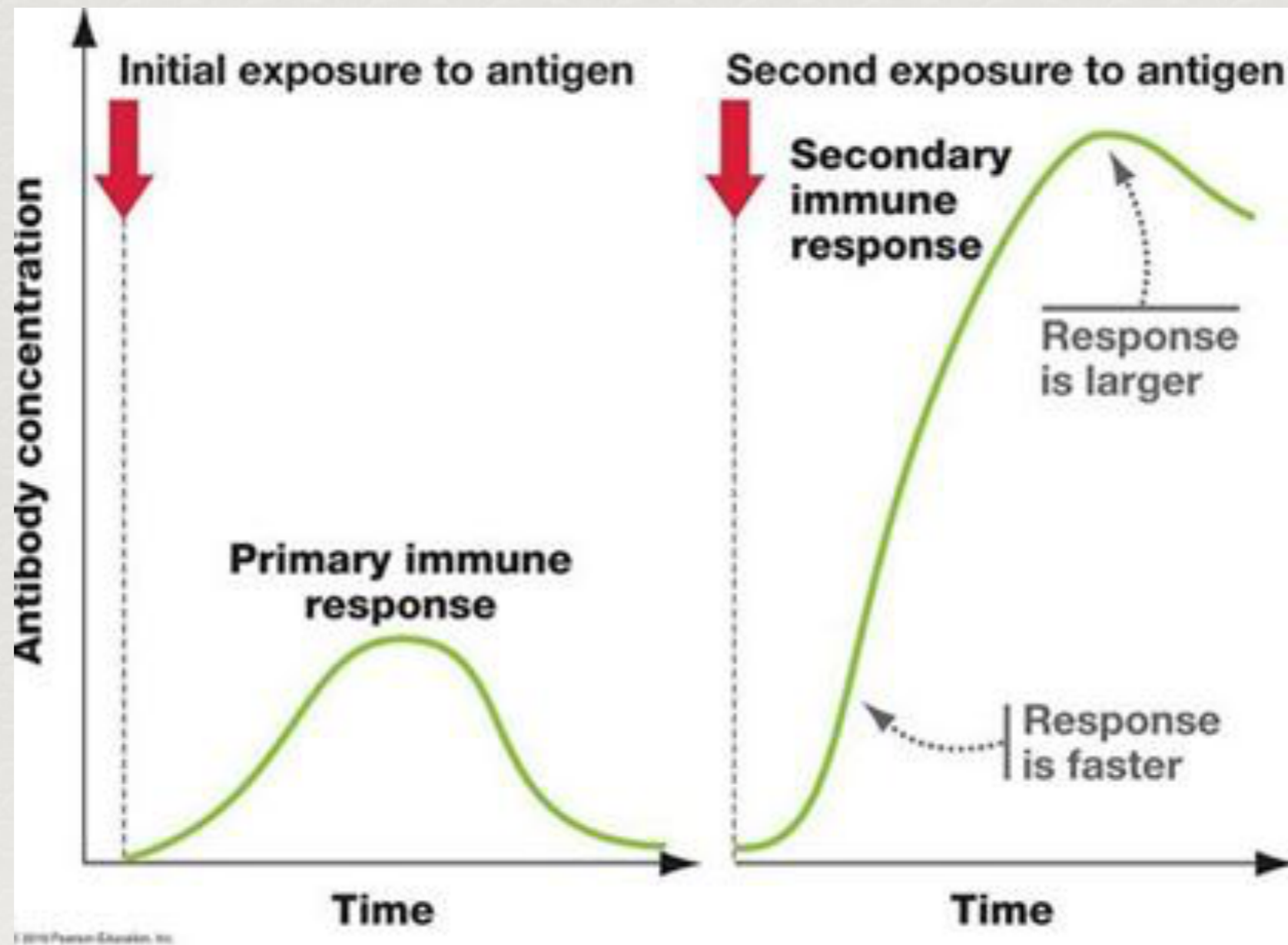
*Killed*

*Modified Live*

*Live*

*Toxoid*

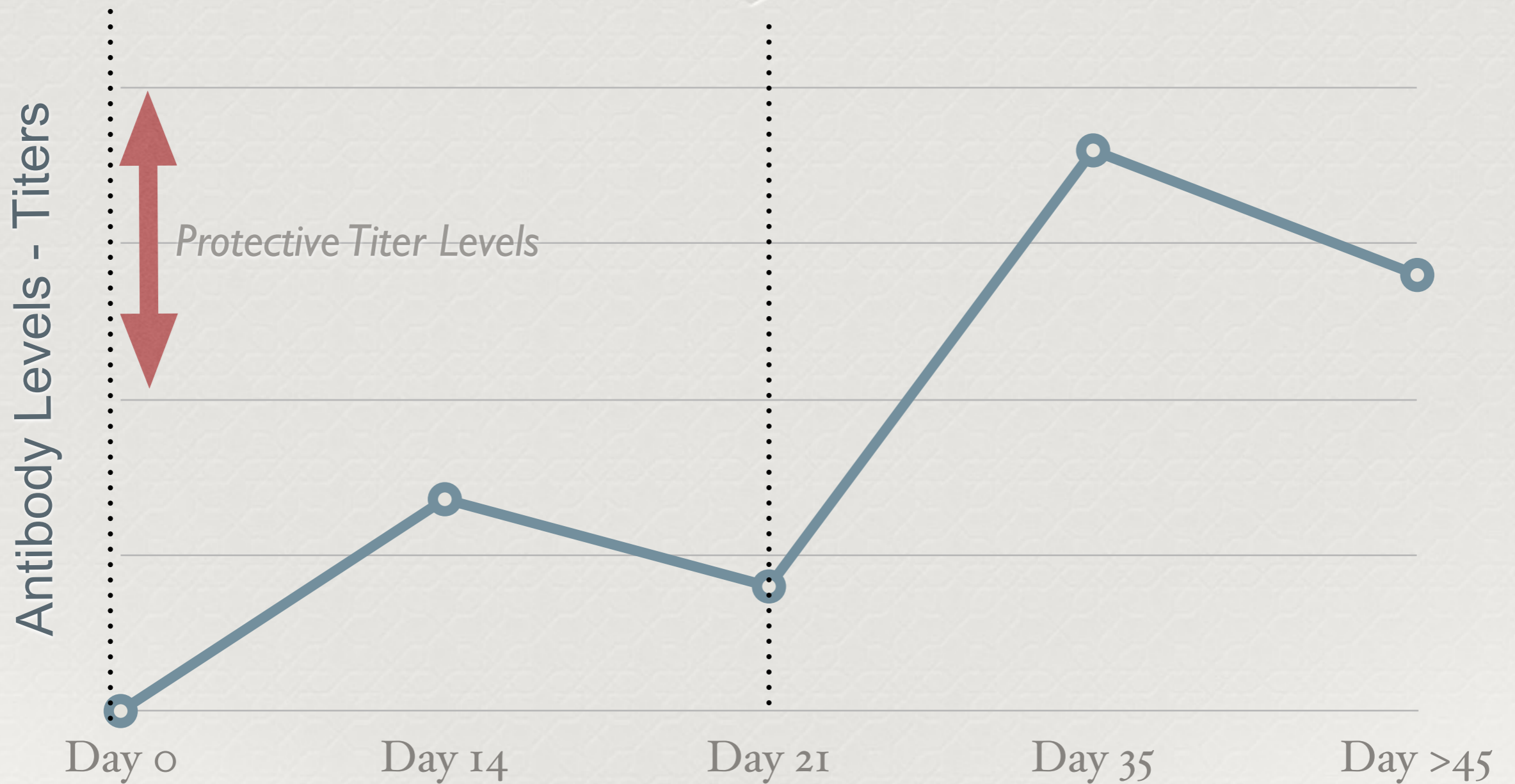
# Vaccines that need a booster



# Immunity to Exposure

*Initial  
Vaccine*

*Booster*





Moving On To Protocols...



# It all starts with MOM

- ✦ The success of your vaccination program starts with the dam.
- ✦ Adequate colostrum intake will provide 8-14 weeks of protection to the calf if she is properly immunized.  
(calves under 70 lb. need 2-3 quarts within the first 6 hours and a total of 4-6 quarts within 12 hours.)



# So... if neonatal diarrhea is an issue

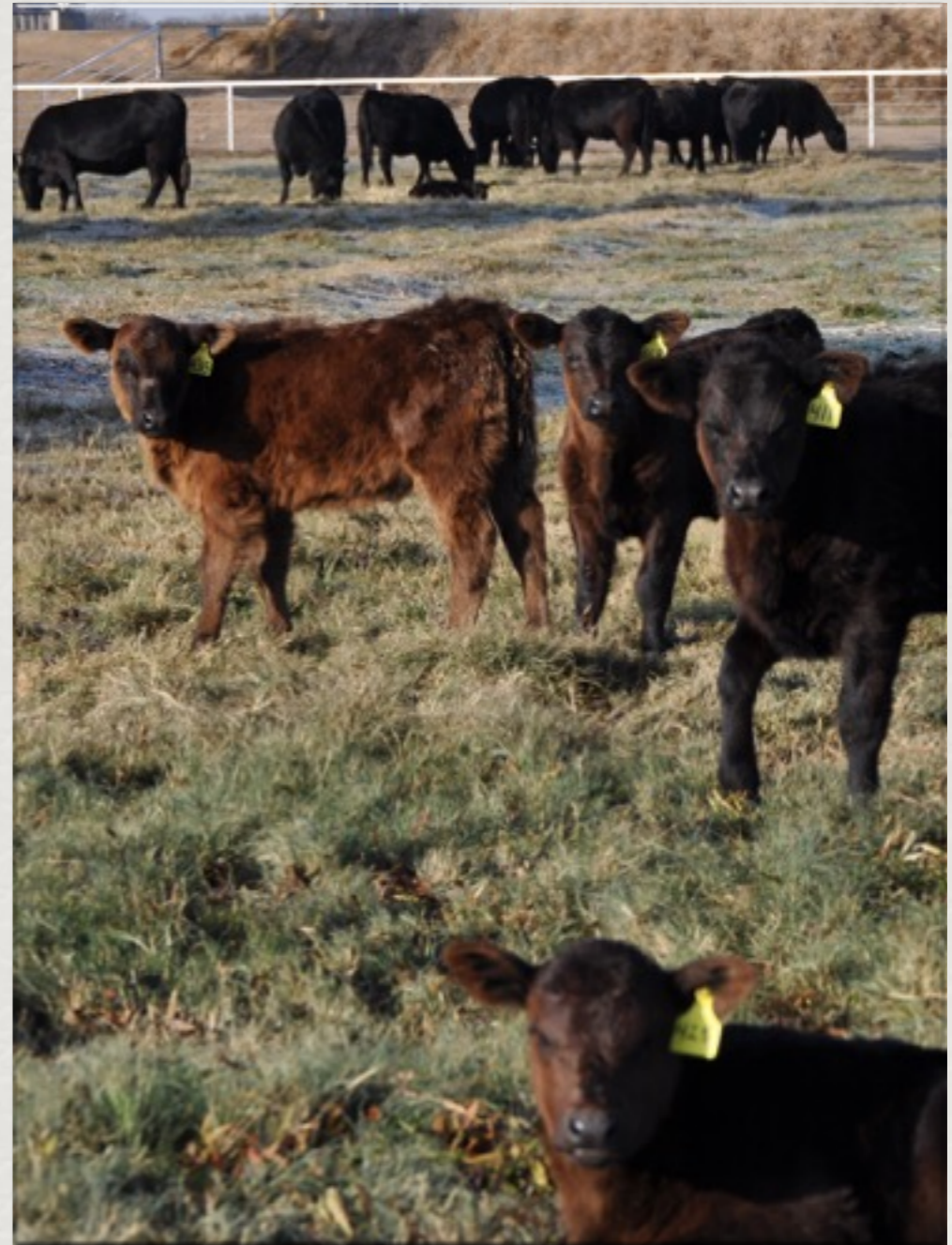
- ✦ Passive Transfer of Immunity

- ✦ By immunizing the dam prior to calving we can prepare the calf for E. coli , Rota & Corona Viruses through adequate colostrum intake.
- ✦ 1st calf heifers or naive cows need 2 doses 3 weeks apart with last dose 3-6 weeks prior to calving.
- ✦ Previously vaccinated cows need one booster 3-6 weeks prior to calving.
- ✦ Always follow the label of the product you are using!

# Calf Vaccines

2-4 months of age ( branding)

- Clostridium 7,8 or 9 way
- Respiratory viral: IBR, PI3, BRSV, BVDV, (intra nasal vs. injectable)
- Respiratory bacterial : manheimia, pasteurella, h. somi ( intra nasal vs. injectable )
- Pinkeye ( autogenous vs. comercial)



# Calf 2-4 months

- ✦ Calves start to co-mingle, rumination begins and males are usually castrated.
- ✦ Maternal antibodies are starting to die off and calf has to create its own immunity either through exposure or immunizations.
- ✦ Calf energy demands are high due to growth.
- ✦ Maternal antibody interference with vaccination

# Pre-weaning/ weaning

5-9 months of age

Clostridium 7,8 or 9 way

Viral Respiratory - IBR,BVD,PI3,BRSV

Bacterial Respiratory - Mannheimia,

Pasteurella and H. somni

Pink Eye ( commercial vs. autogenous)

Leptospirosis



# Pre-weaning/ Weaning

- ✦ Maternal antibodies are no longer protective against diseases
- ✦ Goal is to provide them with immunity before they experience the following...
  - ✦ Stress
  - ✦ Movement/shipment
  - ✦ Co-mingling with new cattle in small space
  - ✦ Feedlot cattle - liver abscesses due to *C. haemolyticum* (red water)
  - ✦ Liver flukes
  - ✦ Vector diseases ( flies and ticks )
  - ✦ Foxtails

# Heifers

Bangs (brucellosis) 4-12 months

EBA “foothill abortion” - at least 60 days prior to breeding.

Anaplasmosis -

- \*Anavac - live culture must vx 4-11 months of age - becomes an immune carrier.

- \* CCA - killed product can give later but initially needs 2 doses. Does not prevent infection but rather gives them a fighting chance before becoming an immune carrier.

# Pre-breeding Replacement Heifers

Modified Live ! - 2 doses with last dose >30 days prior to breeding.

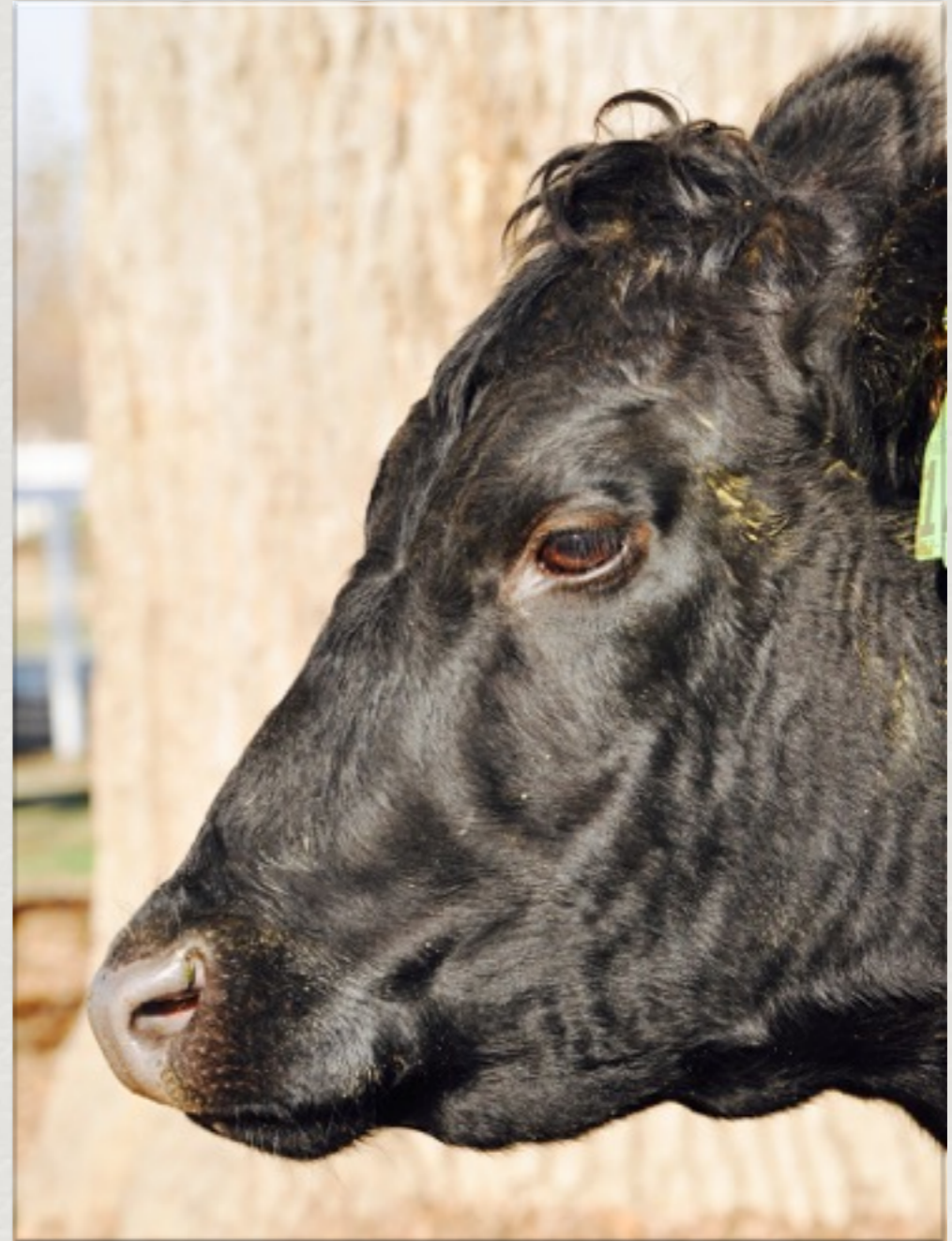
IBR,BVD,PI3,BRSV (viruses)

Lepto (includes *L. hardjo bovis*) (spirochete)

Campylobacter Fetus “V” (bacteria)

Histophilus Somni (bacteria)

Clostridium - 7,8 or 9 way (bacteria)





# Pre-breeding Replacement Heifers

- ✦ Prevention of...
  - ✦ Illness/Disease
  - ✦ Abortions
- ✦ Maximize growth/Feed efficiency
- ✦ Give birth to strong healthy calves

# Bulls Annual Vaccine

- ✿ IBR, BVD,PI3,BRSV
- ✿ Lepto
- ✿ Campylobacter fetus aka Vibriosis -  
“V”
- ✿ Mannheimia, Pasteurella and H.  
somni
- ✿ Clostridium 7,8, or 9 way
- ✿ Anaplasmosis CCA killed
- ✿ Pinkeye

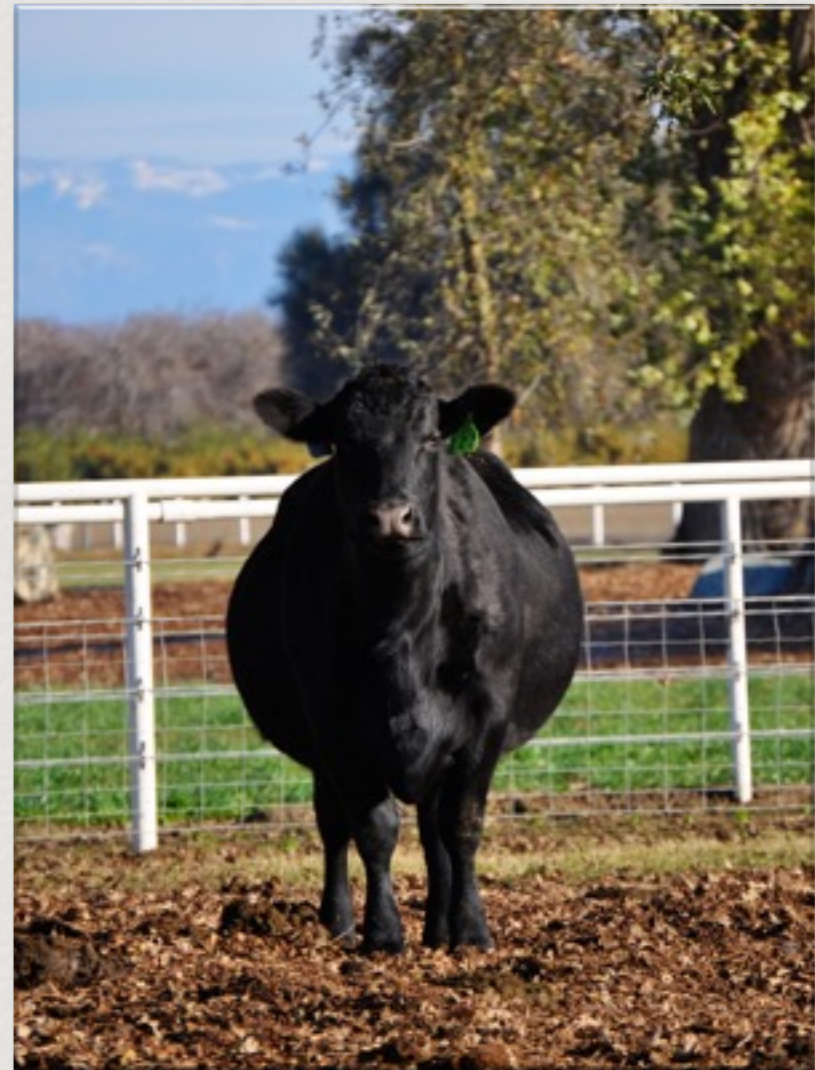


# Bulls Annual Vaccines

- ✿ Sick bulls do not make babies - decreased libido
- ✿ Vibriosis is a venereal disease and can cause cows to abort/poor fertility
- ✿ Keep bulls healthy when adding new animals to the herd.
- ✿ Pinkeye - eyesight is very important for bulls to find cows in heat/estrus

# Cows Annual Vaccines

- ✿ IBR, BVD, PI3, BRSV
- ✿ Lepto
- ✿ Campylobacter Fetus “V”
- ✿ Mannheimia, Pasteurella and H. somni
- ✿ Clostridium 7,8 or 9 way
- ✿ Anaplasmosis CCA killed
- ✿ Pinkeye
- ✿ Rota/Corona Virus + E. coli precalving

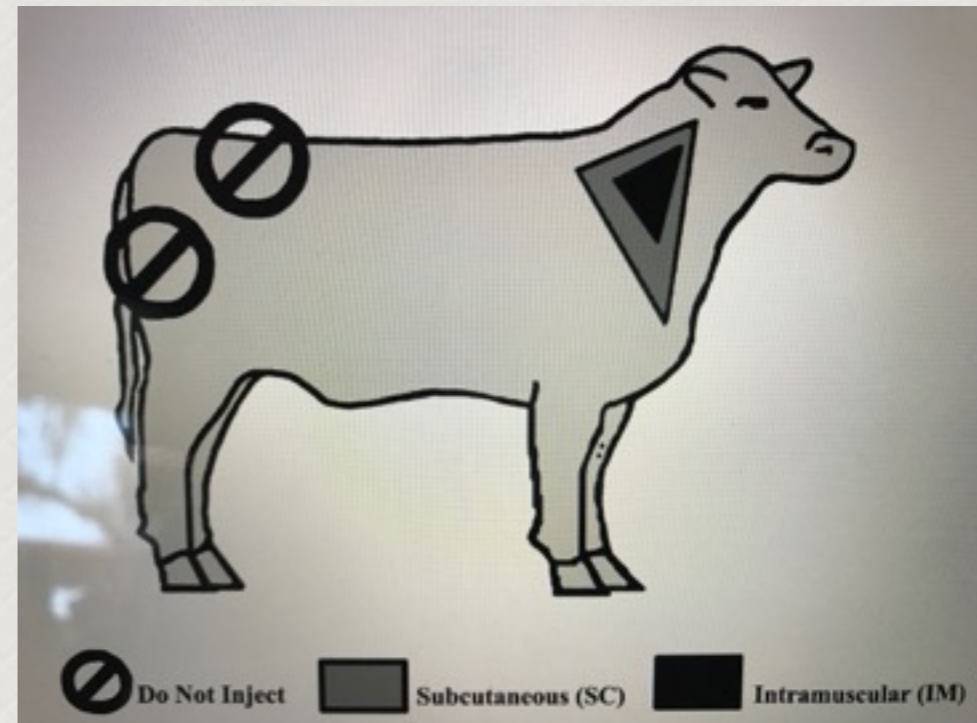


# Cows Annual Vaccines

- ✦ Keep her immunity to disease high and prevent abortions!
- ✦ Maximize feed efficiency
- ✦ Set her up to provide quality colostrum
  - ✦ Calves who receive adequate passive transfer of antibodies through colostrum are set up for success
  - ✦ Calves who have failure or partial failure of passive transfer are at a much greater risk of...
    - ✦ Disease
    - ✦ Death
    - ✦ Decreased gains

# Don't Forget

- ✦ Follow the label
- ✦ Throw away unused reconstituted product
- ✦ Vaccine handling
- ✦ Meat withdrawal times
- ✦ Beef Quality Assurance



# Questions?

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