

Bison Vaccinations
CBA Conference
Nov 2023



ROY LEWIS DVM
ROY LEWIS
VETERINARY
SERVICES

Bison Bio



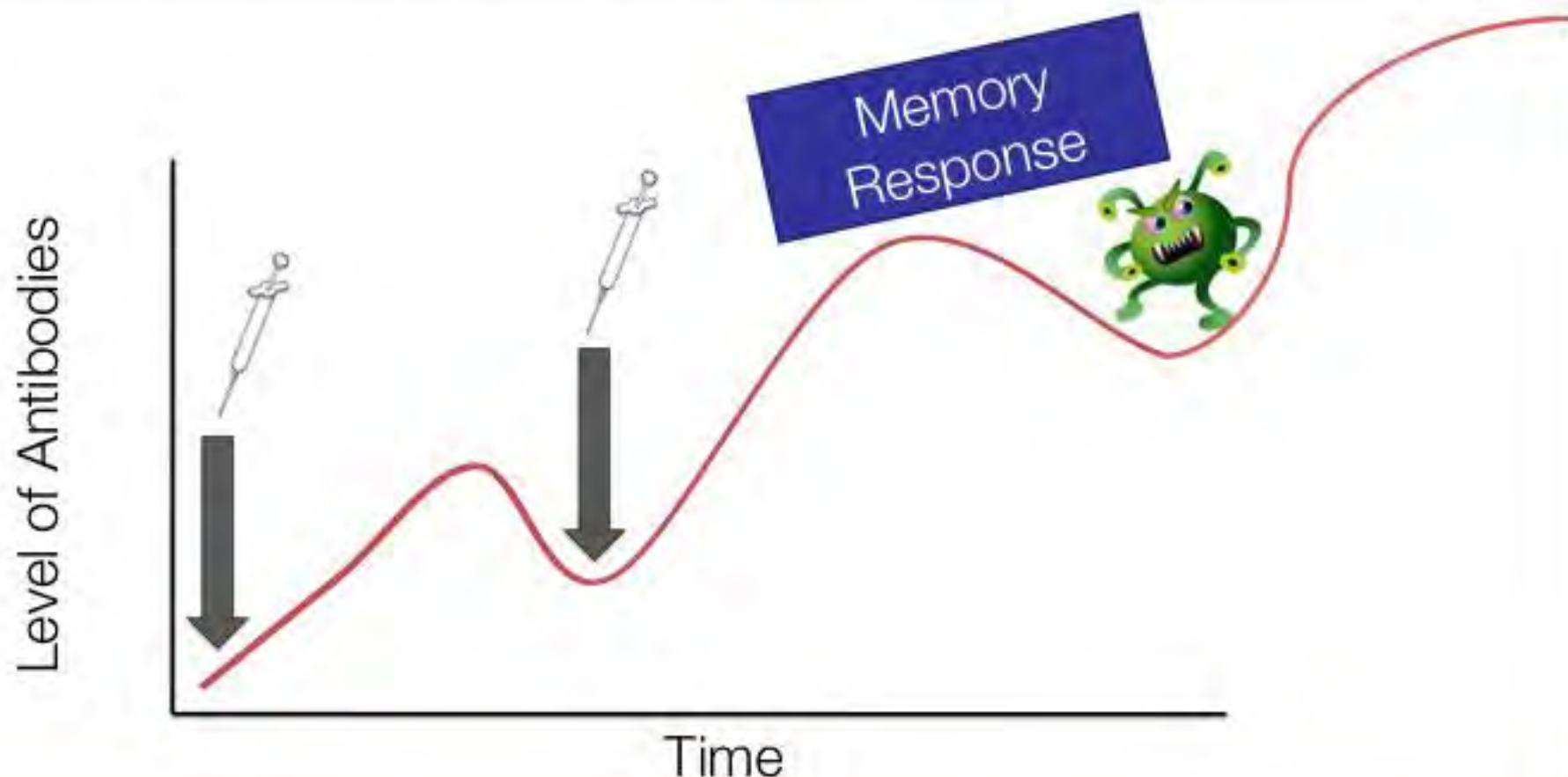
- Roy Lewis DVM 1981 WCVM
- Large Animal practice 5 % bison
- Has Syncrude now Suncor bison as a client for over 30 years.
- Owned up to 70 bison cows
- Always a good day when working bison

Vaccinating Pts for Bison

- Nothing on the label for bison.
- Do correctly if do it
- Is a booster shot required
- Timing of the Vaccine Does it fit into processing.
- Efficacy of the vaccine
- Prevalence of a disease that affects bison/cattle in your area



WHY VACCINATE?



UCVM Beef Cattle Conference 2012

PUSHING THE FRONTIERS OF BEEF CATTLE HEALTH

Vaccination principles

- Spacing Hand breath apart preferable opposite side.
- Clean syringes warm water only

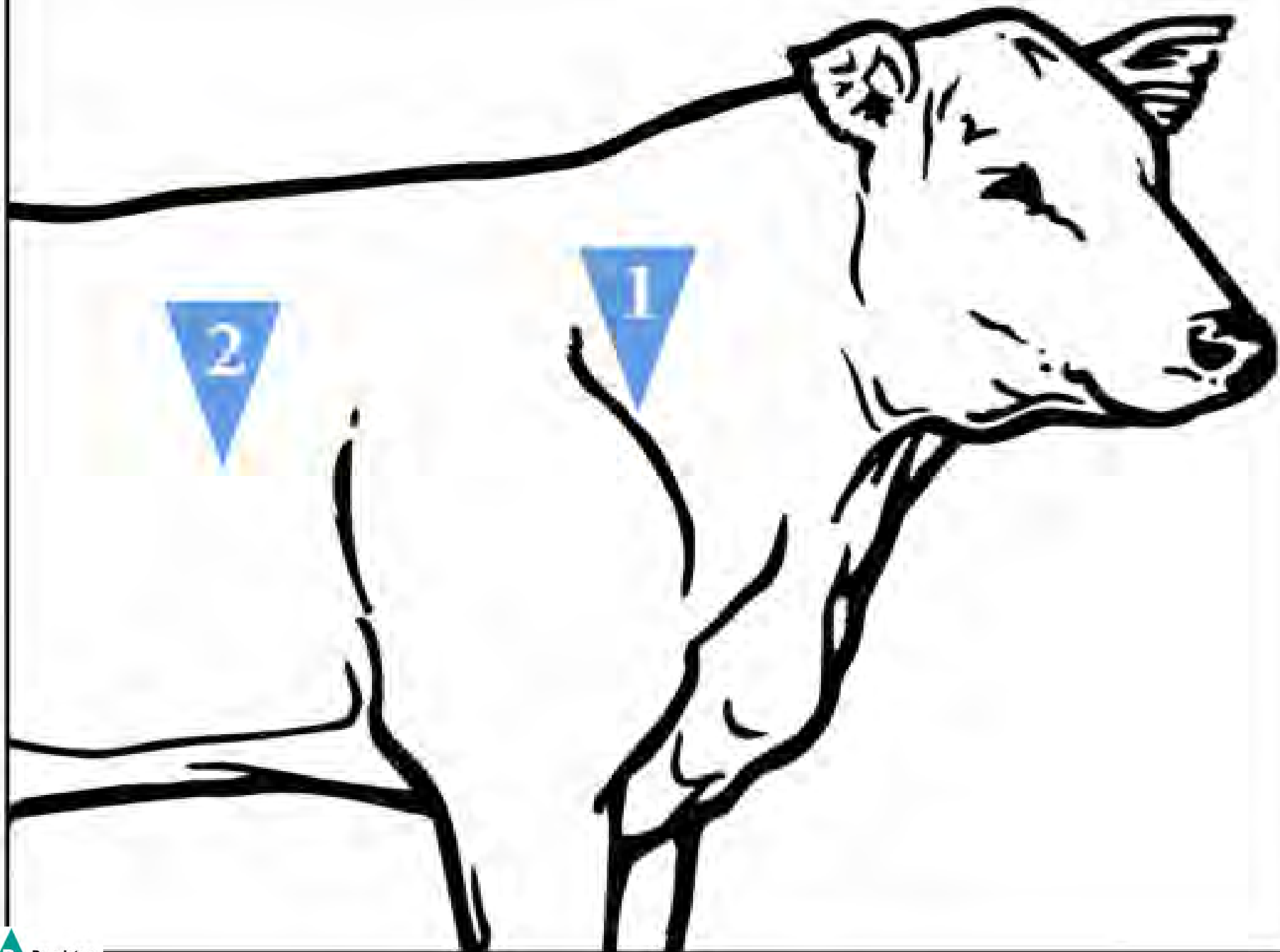
Syringe label it don't use for other vaccines

- **Don't mix syringes.**
- Keep chain of Refrigeration keep from Freezing
- One handed technique is hard in bison.



Cross Five Cooler





Vaccinating SC for all shots



Vaccination a Bison Herd For???

- Clostridial Disease
- Anthrax if in Area.
- Viral & Bacterial Pneumonia & Histophilus at finishing locations
- **DON'T GIVE MODIFIED LIVE VACCINES TO PREG COWS !**
- US areas such as Texas lots of Rabies Pinkeye Vaccine given.
- Mycoplasma ??
- MCF ?? Future
- Johnes ????? Distant Future



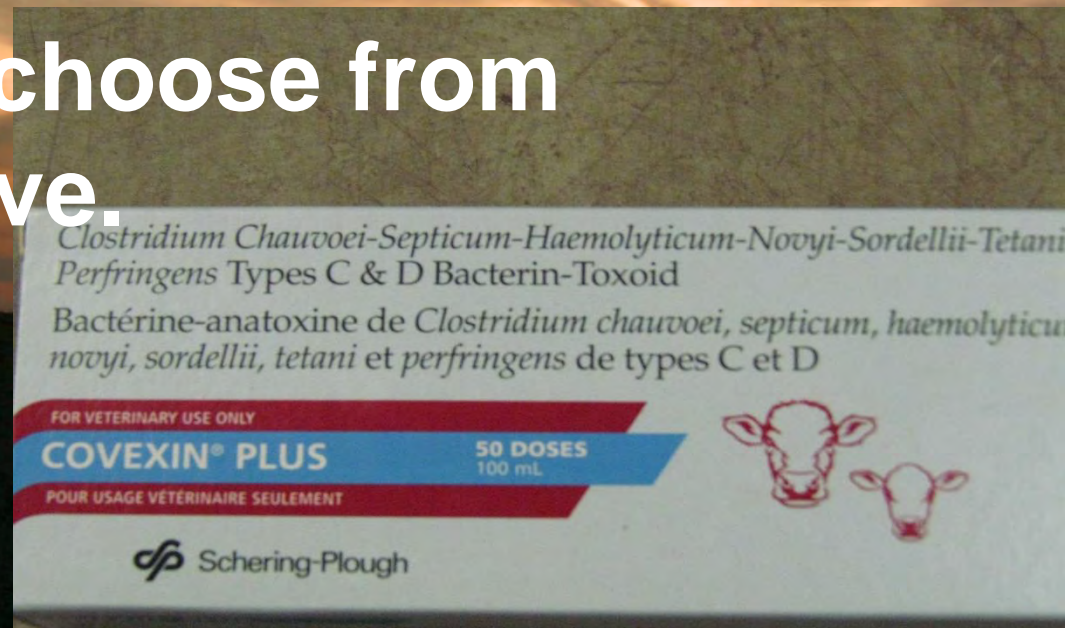


Diseases Should Vaccinate for in bison.

- *Clostridial Diseases (blackleg, malignant edema, redwater.)*
- *Misnomer adult bison never get blackleg.*

Many vaccines to choose from
All are very effective.

Tasvax
Ultrabac
Fermicon
Vision



Cattle Vaccine

10 Doses 20 mL

**CLOSTRIDIUM CHAUVOEI-
SEPTICUM-HAEMOLYTICUM-
NOVI-SORDELLII-
PERFRINGENS TYPES C & D
BACTERIN-TOXOID**

Vision[®] 8 with SPUR[®]*



MERCK



Blackleg I Have not seen in young bison ca

Diseases Could Possibly Vaccinate for in bison.

- *Resp Pathogens, Viral and Bacterial*
 - *IBR BVD PI3 BRSV Mannheimia*
 - *Anthrax if in area.*
 - *Pneumonia mycoplasma 2 to 3 s
advance*
- Malignant Catarrhal Fever??*



Cattle Vaccines for Resp Disease



Mannheimia Pneumonia & Parasites Co-Morbidity



Heavily Parasitized Bison



Fibrin Mannheimia

Anthrax 2006-Saskatchewan

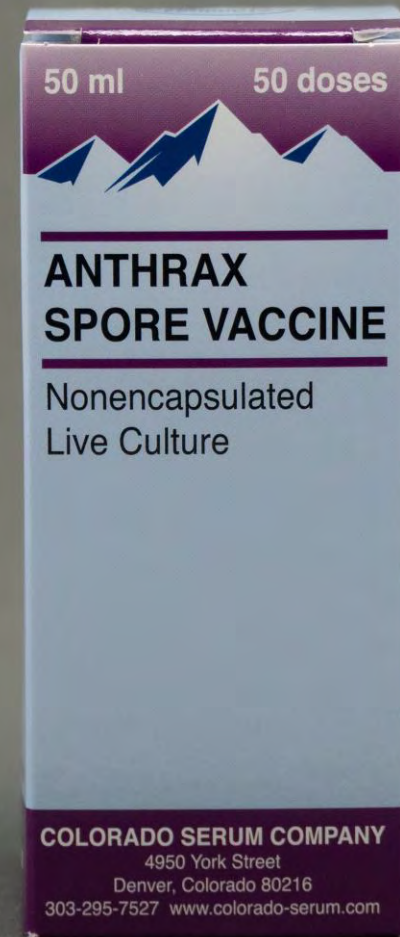
- Outbreak from June 26- September 5¹
 - 153 premises, in 43 Rural Municipalities², 806 livestock deaths
 - Cattle-493 (cattle and bison represent 92%)
 - Bison -254
 - Ovine -33
 - WTD/Elk-13
 - Horse-6
 - Swine -3
 - Caprine -2
 - Carcasses burned (70%) or buried (24%)
 - Inaccessible (6%)

¹ 1 mortality occurred on Sept 21 on a premises that had previously been vaccinated

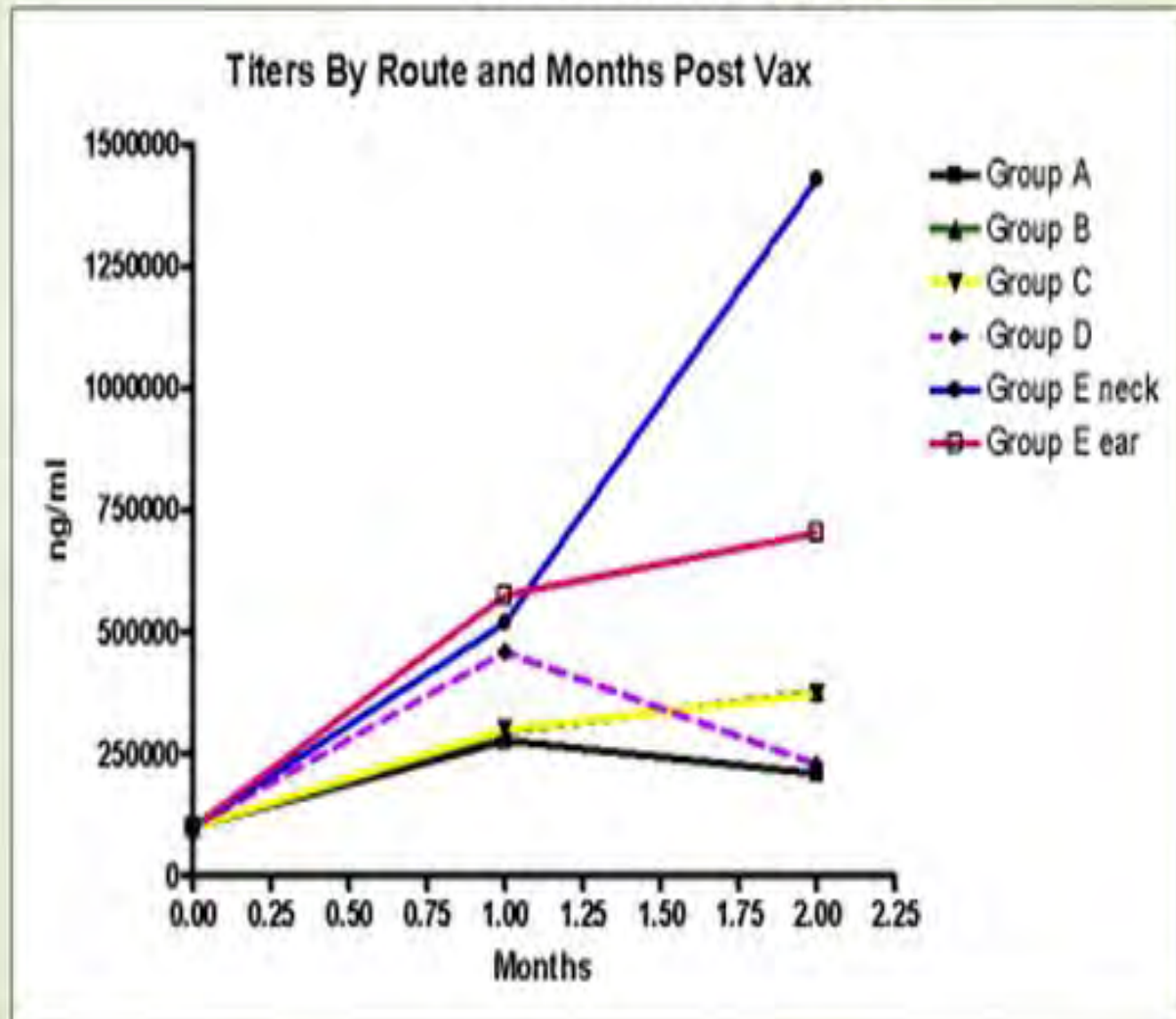
² 40 of these Rural Municipalities were contiguous ; 3 were in areas of the province that did not have similar environmental conditions and were likely representative of "normal" background levels of anthrax.

Anthrax Vaccination

- 1 cc SC dose
- Lasts 6 months
- If double dose longer immunity
- Best was with needleless injectors .
- Research Turner Enterprises Dr Dave Hunter



Anthrax Vaccine Study – Two Months





**Mycoplasma Autogenous vaccines
Now commercial cattle vaccines
must be given multiple times in
advance of disease**

Foot & Mouth Hopefully Not

- Ring Vaccination
- Countries getting vaccine banks.
- Super Contagious
- Many different strains need to isolate
- Immunity very fast to develop to vaccination.
- Huge production loss



Questions??

